#### **BEFORE**

#### THE PUBLIC SERVICE COMMISSION OF

#### SOUTH CAROLINA

DOCKET NO. 2002-63-G - ORDER NO. 2002-761

### NOVEMBER 1, 2002

IN RE:	Application of Piedmont Natural Gas	)	ORDER APPROVING \
	Company for an Adjustment of its Rates and	)	NEW RATES AND
	Charges and for Approval of Revised	)	CHARGES AND
	Depreciation Rates	)	DEPRECIATION RATES

### I. INTRODUCTION

This matter comes before the South Carolina Public Service Commission (hereinafter the "Commission") by way of the Application of Piedmont Natural Gas Company, Inc. (hereinafter "the Company"), filed on May 3, 2002, for an increase in certain rates and charges for natural gas services provided by the Company in South Carolina and for approval of revised depreciation rates. The Application was filed pursuant to S.C. Code Ann.§58-5-240 (Supp. 2001), as amended, and R.103-830, et seq of the Commission's Rules and Regulations.

On May 17, 2002, the Commission's Executive Director instructed the Company to cause to be published a prepared Notice of Filing and Hearing once a week for two consecutive weeks in newspapers of general circulation in the Company's service area. The Notice of Filing and Hearing indicated the nature of the Company's Application and advised all interested parties desiring to participate in the proceeding of the manner and time in which to file the appropriate pleadings. It also indicated that a hearing would be held in the instant proceeding. The Company was required to notify directly all customers affected by the proposed rates and charges. On July 22, 2002, the Company furnished affidavits and certification demonstrating that the Notice of

Filing and Hearing had been duly published and mailed to each customer affected by the rates and charges proposed by the Company's Application.

Petitions to Intervene were filed with the Commission on behalf of Philip S. Porter, Consumer Advocate for the State of South Carolina (hereinafter the "Consumer Advocate"), and the South Carolina Energy Users Committee (hereinafter the "SCEUC").

Pursuant to notice given in accordance with the applicable provisions of law and with the Rules and Regulations of the Commission, a public hearing commenced on September 4, 2002, and continued on September 5, 2002, with the Honorable Mignon L. Clyburn, Chairman, presiding. Appearances were entered by Kerry McTigue, Esquire, Jerry W. Amos, Esquire, and James J. Jeffries IV, Esquire, on behalf of the Company; Elliott Elam, Esquire, and Hana Pokorna-Williamson, Esquire, on behalf of the Consumer Advocate; Scott Elliott, Esquire, on behalf of the SCEUC, and F. David Butler, General Counsel, on behalf of the Commission Staff.

The Company presented the direct testimony of six witnesses on its behalf: (1) Ware F. Schiefer, Chief Executive Officer of the Company; (2) Thomas E. Skains, President and Chief Operating Officer of the Company, (3) Barry L. Guy, Vice President and Controller of the Company; (4) Chuck W. Fleenor, Vice President - Gas Services of the Company; (5) Bill R. Morris, Director of Rates of the Company and (6) Dr. Donald A. Murry, Economist with C.H. Guernsey & Company. Messrs. Guy and Fleenor and Dr. Murry also presented rebuttal testimony on behalf of the Company.

The Consumer Advocate presented the direct testimony of two witnesses: (1) Dr. Michael J. Ileo, President and Chief Economist of Technical Associates, Inc.; and (2) Glenn A. Watkins, Vice President and Senior Economist of Technical Associates, Inc. Mr. Watkins also presented surrebuttal testimony on behalf of the Consumer Advocate.

The SCEUC presented the direct testimony of Kevin W. O'Donnell, President of Nova Energy Consultants, Inc.

The Commission Staff presented the direct testimony of three witnesses: (1) Dr. James Edward Spearman, Research and Planning Administrator; (2) Brent L. Sires, Chief of Gas; and (3) Norbert M. Thomas, Audit Manager I.

In the consideration of the evidence in the record before us, the Commission has remained mindful of our statutory responsibility, delineated by S.C. Code Ann.§§58-5-210, et seq.(Law Co-op. 1977), to determine the lawfulness and reasonableness of rate adjustments proposed by public utilities. In the due exercise of the responsibility and for the reasons more fully discussed herein, the Commission has determined that an overall rate of return on rate base resulting from the Company's gas operations of 10.39%, based on adjusted test year operations, is fair and reasonable, and that in order to have the opportunity to achieve such a return, the Company would have required additional annual revenues of \$8,381,2201 and to recover its Demand-Side Management (DSM) costs in the manner set forth herein. Founded upon the Company's test year operating and financial experience as adjusted, the Commission has concluded that the allocation of the additional revenue, as provided herein, meets the applicable statutory criteria and is consistent with other pertinent legal pronouncements. Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed.2d 333 (1944); Bluefield Water Works & Improvements Co. v. Public Service Commission of West Virginia, 262 U.S. 679, 43 S.Ct. 675, 67 L.Ed. 1176 (1923); Southern Bell Telephone and Telegraph Company v. Public Service Commission of South Carolina, 270 S.C. 590, 244 S.E.2d 278 (1978).

<sup>&</sup>lt;sup>1</sup> These revenues constitute 55% of the Company's requested increase of \$15,336,891 in revenues.

It should be noted that the Consumer Advocate filed a Motion to Strike from the record Late Filed Hearing Exhibit No. 8 after the hearing. This late-filed exhibit was to consist of supporting data for Company witness Fleenor's testimony on the issue of weather normalization. Commissioner Atkins specifically requested that the exhibit contain "the raw data, and then the linear regression graphs, and also the statistics, such as R squared, and standard error of estimates—that's probably an Excel spreadsheet—essentially the supporting data for Mr. Fleenor's testimony there." Tr., Vol 1 at 156 and 158. The Consumer Advocate states essentially two grounds for his Motion. First, the Consumer Advocate states that the exhibit goes far beyond what was requested by Commissioner Atkins and attempts to introduce additional evidence into the record. Second, the Consumer Advocate argues that he had no opportunity to respond to the exhibit, since it was filed so late, and that, accordingly, his Due Process rights were violated.

Piedmont filed a Response to the Motion. First, the Company states that, with regard to the ground that it filed more information than requested, it filed what it believed to be responsive to the request. However, the Company further notes that the Commission can simply disregard any portion of the exhibit that it believes is non-responsive to the Commissioner's request. Further, Piedmont believes that other evidence presented by it fully supports its weather normalization adjustment, and that it is not necessary to refer to the Exhibit to support the Company's adjustment. With respect to the Consumer Advocate's claim that the Hearing Exhibit was not timely filed, the Company notes that the record does not specify a time for the filing of the exhibit, however, it was filed in a timely manner in consideration of other circumstances surrounding the case. Piedmont also notes that the Consumer Advocate did not object to the filing of the late-filed exhibit, did not request that it be filed at any specific time and did not request the right to respond to the exhibit in its brief or otherwise. The Company summed up its

position by stating that it did not object to the Consumer Advocate's Motion to strike any such portion of Hearing Exhibit 8 that the Commission determines is not responsive to Commissioner Atkins' request; however, to the extent that the Commission determines that Hearing Exhibit 8 is responsive to that request, Piedmont requests that that the Commission deny the motion with respect to that portion.

We deny the Motion to Strike. We will give whatever weight we deem necessary to the information provided in the Exhibit. Frankly, however, as will be shown in the discussion of weather normalization below, we did not consider the Hearing Exhibit as necessary to support our findings on the subject. The record was already replete with evidence to support that finding, as is shown and cited. Since we did not rely on Hearing Exhibit 8 in any manner to support our finding on weather normalization, the Motion to Strike is actually moot, and any alleged error is harmless, if indeed any error exists, which we deny.

#### II. THE COMPANY

The Company is incorporated under the laws of the State of North Carolina and is duly authorized by its Articles of Incorporation to engage in the business of transporting, distributing and selling natural gas. It is duly domesticated and is engaged in conducting the business above mentioned in the States of South Carolina, North Carolina and Tennessee. It is a public utility under the laws of South Carolina, and its public utility operations in South Carolina are subject to the jurisdiction of the Commission. See, S.C. Code Ann.§58-3-140(A) (Supp. 2001). The Company is authorized and empowered to acquire gas franchises and properties within the State of South Carolina. As of January 2002, the Company delivered gas to approximately 121,000

customers in South Carolina. Among the South Carolina communities served by the Company are Greenville, Spartanburg, Anderson and Gaffney.

### III. TEST YEAR

A fundamental principle of the ratemaking process is the establishment of a test year period. Ideally, such a period should be represented by the most recent twelve months preceding the date of filing a rate adjustment application for which data is available. While the rates and charges finally approved will have prospective effect only, this Commission has routinely adhered to the view that the immediate past experience, characterized by identifiable operating results for a complete 12-month period, provides the most reliable guide for the immediate future. The reliance upon the test year concept, however, is not designed to preclude the recognition and use of other historical data which may precede or postdate the selected twelvemonth period.

Integral to the use of an average year, representing normal operating conditions to be anticipated in the future, is the necessity to make normalizing adjustments to the historic test year figures. Only those adjustments that have reasonable and definite characteristics and that tend to influence reflected operating experience are made to give proper consideration to revenues, expenses and investments. Southern Bell, supra, 244 S.E.2d at 284. Adjustments may be allowed for items occurring in the historic test year, but that will not recur in the future, or to give effect to items of an extraordinary nature by either normalizing or annualizing such items to reflect more accurately their annual impact or to give effect to any item that should have been included or excluded during the historic test year.

In the instant proceeding, the Company's Application was based on actual operating experiences for the twelve-month period ended January 31, 2002, and included financial and

operating information for that period. The Commission Staff and the Consumer Advocate likewise presented their evidence generally within the context of the same test period. In consideration of the relative proximity of the commencement of this proceeding, the Commission finds the twelve months ended January 31, 2002, to be a reasonable period for which to make our ratemaking determination herein.

## IV. ACCOUNTING AND PRO FORMA ADJUSTMENTS

The Company filed with its Application a schedule showing its operating revenues, operating expenses, net operating income, net operating income for return, net plant-in-service and return on investment for the test period. In addition, the Company filed schedules showing certain accounting and pro forma adjustments to the test period information. The Commission Staff and the Consumer Advocate proposed certain adjustments to the information filed by the Company. This order will discuss in detail only those accounting and pro forma adjustments in which the Staff or the Consumer Advocate proposed a different regulatory treatment than the Company. All adjustments on which the Company and Staff agree and to which no party objected or offered evidence to the contrary are hereby adopted.

# A. Adjustments to Revenues.

During the test period the Company had revenues of \$159,967,061 from the sale and transportation of gas. Both the Company and the Staff proposed an adjustment to decrease these revenues by \$19,829,407 to a going level of \$140,137,654 based on normalized volumes at present rates. The Consumer Advocate proposed to decrease revenues from the sale and transportation of gas by \$12,918,542 to a going level based on normalized volumes at present rates.

The difference of \$6,910,865 between the Company and the Staff, on the one hand, and the Consumer Advocate, on the other hand, relates to the different manner in which the Company and the Staff and the Consumer Advocate determined their respective adjustments to normalize weather. Company witness Fleenor testified that the method used by the Company to normalize volumes for weather is the same method the Company has historically used in general rate proceedings in South Carolina, North Carolina and Tennessee. This method measures test-period consumption by rate class and performs a linear regression utilizing average weather over the previous 30 years as the independent variable and compares it with actual test period weather. Mr. Fleenor further testified that the method used by the Company is the identical method used by the Company in its last rate case in South Carolina, Docket No. 95-715-G, and that it is also the identical method used by Consumer Advocate witness Watkins in that case.

Consumer Advocate witness Watkins testified that the method used by the Company (and historically used by this Commission) is flawed because it uses an insufficient number of observations. He contends: "In general, the larger the sample size used to develop the reqression equation, the more accurate and reliable the model and attendant forecasts." In response, Company witness Fleenor testified that the average use per customer has been decreasing for several years for reasons unrelated to weather, that this change in consumption patterns creates the potential for error in the linear regression weather normalization analysis by overstating current consumption per customer, and that the use of a three-year period magnifies this effect. Although Mr. Watkins admitted that a number of factors other than weather will influence long-term gas usage, he contended that this reduction will not be perceptible over a three-year period.

At the request of the Consumer Advocate, selected pages from GRI, <u>Evaluating the</u> <u>Decline in Residential Gas Usage</u>, Final Report April 2000, were introduced into evidence for

the purpose of supporting Mr. Watkins contention that residential consumption is not perceptibly affected by factors other than weather. Although the pages referred to by the Consumer Advocate state that "variation in weather is the most significant factor affecting residential gas consumption for most utilities due to the dominance of space heating gas load," they do not support the Consumer Advocate's claim that residential consumption is not perceptibly affected by factors other than weather. One of the pages selected by the Consumer Advocate (Page 4-48), sets forth the effect of a number of factors other than weather on residential gas consumption in the South Atlantic region where the Company is located. These factors include space heating efficiency, aggregate R value, space heating share, and other factors.

As shown on page 4-48, these reductions are partially offset by the following factors: Real Price of Gas (+2.36), Real Disposable Income (+0.67), Home Size (+5.53), Hearth Products (+1.33) and Water Heater Share (+0.46). The net effect, however, is a reduction of 9.86 MCF per residential customer for factors other than weather.

Page 30 of the report summary is entitled "Estimated Average Overall Effect of Explanatory Factors on U.S. National and Regional Use Per Customer." On this page, it is clear that in the South Atlantic Region (in which the Company is located) there was a reduction of 9.9 MCF per year per customer. This number is simply a rounding of the 9.86 MCF per year per customer calculated above.

After carefully considering the testimony in this case, the Commission concludes that the method used by the Company to determine customer consumption for normal weather is appropriate. This conclusion is supported by the following findings and conclusions:

1. The method approved herein is consistent with the method historically found by this Commission to be just and reasonable. Since sales are normalized for weather both when weather is warmer than normal and when weather is colder than normal, it is important to be consistent; otherwise, the Company may be unfairly advantaged or disadvantaged. This truism is recognized by the authors in AGA, Regulation of the Gas Industry, § 40.04[4][b] as follows:

"State courts have usually granted broad discretion as to the use of normalization. (Citations omitted). One court did suggest, however, that, if test-year degree days were an extreme departure from normal, then an adjustment would be required. (Citation omitted). The issue cuts both ways because in a warmer than normal test year, a utility would prefer to avoid normalization; in a colder than normal year, the opposite is true. Consistency of treatment is obviously essential, as it is a well-reasoned justification for the resolution of the issue."

- 2. In the Company's most recent past rate case, Docket No. 1995-715-G, Mr. Watkins also objected to the weather normalization method used by the Company. In that case, however, Mr. Watkins objected to the fact that the Company did not increase curtailed industrial load to offset the reduction to residential load. He did not object to the use of the one-year test period data to determine the effect of weather. To the contrary, he based his proposals on the one-year test period data used by the Company.<sup>2</sup>
- 3. The use of the 12-month test period is consistent with the purpose of weather normalization. The purpose of weather normalization is to determine how the 12-month test period was affected by weather and not how weather for the past three years may have affected the test period. This is true because it is the 12-month test period revenues and cost of gas that are adjusted for weather. Mr. Fleenor testified to the importance of using current data because of the changing consumption characteristics of Piedmont's customers.

<sup>&</sup>lt;sup>2</sup> <u>See, e.g.</u>, Mr. Watkins Surrebuttal testimony, Transcript Vol. 4, page 26, where he states that the weather for November 1993 was 4.5% colder than normal (4.54 vs. 434.7) and that the weather for December 1993 was 11.2% colder than normal (746.6 vs. 671.2), all of which is consistent with the use of the 12-month weather normalization used by Company witness Schiefer and adopted by the Commission in that case.

- 4. The use of a three-year period would be inconsistent with the method used by the Company to compute the "R" factors in its Weather Normalization Adjustment formula. No one has introduced any evidence to support how these "R" factors would be affected if the Commission were to change its long-standing policy and use the three-year period supported by the Consumer Advocate.
- 5. For the reasons set forth above, the Commission is unconvinced by Mr. Watkins' contentions that his use of a three-year period is not affected by factors other than weather.
- 6. Even if the Commission had concerns about its present policy of using the 12-month test period for weather normalization purposes, the Commission is not convinced that it should make changes in this proceeding for at least two reasons. First, the reasons espoused by the Consumer Advocate involve the analysis of complicated and complex matters of statistics and the ability of various statistical methods to properly account for the effect of other factors that affect residential consumption. In PacificCorp, dba Utah Power & Light Co., 201 PUR 4<sup>th</sup> 467 (Utah PSC, 2000), the Division of Public Utilities expressed concern about the method used by the applicant in that rate case to normalize for weather. The Utah Public Service Commission determined that it would not be appropriate to approve a change in that case. Instead, it decided that a more appropriate procedure would be to have a study performed by the parties for consideration in a future proceeding.

Second, as pointed out by Staff witness Sires, any changes in this Commission policy would also affect another utility who is not represented in this proceeding. When faced with a similar problem, other public service commissions have held that it is not appropriate to change long-term policies that affect an entire industry in a company-specific docket. See, e.g., Re Public Service Company of Colorado, Docket No. 93S-001EG, Decision No C93-1346, —

PUR4th — (Col. Pub. Util. Comm'n, 1993)(holding that its policy with respect to the recovery of take-or-pay costs should not be changed in a company-specific rate case since it would be a significant change to its policy and it involved complicated and controversial issues that would need to be fully investigated in a separate proceeding.)

7. In short, the Consumer Advocate has failed to provide sufficient support for us to change our long-standing policy to normalize weather on the basis of the 12-month test period.

As stated by the Kansas Corporation Commission in Re Anadarko Gathering Company, \_\_ PUR

4<sup>th</sup> \_\_ 1999 WL 641102 (Kan.S.C.C., June 02, 1999:

"The Commission attempts to maintain consistency in its decisions to the degree possible, while still recognizing the temperament in many dockets that exists requiring decisions on a case-by-case basis. When its decision in a certain matter, however, is amenable to translation to related issues, the Commission will endeavor to avoid departure from its long standing practice." (Citation omitted.)

For the foregoing reasons, the Commission finds and concludes that the adjustment to revenues proposed by the Company and the Staff is appropriate.

## B. Adjustment to Cost of Gas.

The Staff and the Company proposed to decrease cost of gas to a going-level basis. The adjustment was based on normalized volumes included in the Company's pro forma revenue adjustment at a benchmark commodity cost of gas of \$3.50 and annualized demand charges. The benchmark commodity cost of gas of \$3.50 was filed by the Company in its Gas Cost Recovery Mechanism effective November 1, 2001. Additionally, Staff has included the under-recovery of gas demand costs of \$1,292,891 based on annualized demand costs in its pro forma cost of gas calculation, whereas the Company has included this under-recovery as a portion of the proposed revenue increase.

The Consumer Advocate contended that the Company's method of normalizing for weather is not appropriate and, therefore, the Company's commodity cost of gas should be increased by \$3,034,523 to reflect the cost of the additional volumes estimated by the Consumer Advocate. The Commission has previously rejected the Consumer Advocate's arguments with respect to the need to change the method used to normalize for weather in this proceeding. Those same reasons apply in the present case.

The Consumer Advocate noted that the method used by the Company to allocate gas demand costs to South Carolina is not appropriate and, therefore, the Company's demand cost of gas should be decreased by \$3,255,844 to reflect the reduction in demand costs. Consumer Advocate witness Watkins gave two reasons for this proposal. First, he contended that the allocation of gas demand costs to South Carolina on the basis of annual sales volumes does not reasonably relate to cost causation. Second, he contended that the Company's allocation also results in an over-recovery of actual demand on a combined North Carolina and South Carolina basis. He supported his contentions with the assertion that North Carolina allocates gas demand charges on the basis of design day demand.

In rebuttal, Company witness Fleenor discussed the current policy of the Commission to allocate gas demand charges on the basis of annual sales. He asserted that this policy has been followed by this Commission for many years and results in the proper allocation of gas demand charges to South Carolina. He disputed Mr. Watkins' assertion that North Carolina has historically allocated gas demand cost on the basis of design day demand, pointing out that in Piedmont's most recent three cases the allocation of demand was pursuant to a settlement with the other parties and that the allocation percentages were not imposed by the Commission pursuant to any express methodology and, in fact, the percentages used by North Carolina are not

the same as the design day percentages. With respect to Mr. Watkins' assertion that the allocation percentages used in South Carolina and North Carolina do not add up to 100%, Mr. Fleenor testified that the allocation of many other expenses do not add up to 100% and that the only way for that to happen would be for one of the two commissions to cede its authority to the other commission. Mr. Fleenor further testified that the gas demand costs allocated by North Carolina are based on a different test period and include different gas costs.

In his surrebuttal testimony, Mr. Watkins contended that the difference in the demand gas costs allocated to the two states is immaterial. He states that the only difference in the definition of fixed demand costs between the two Carolinas is as follows: (1) Cardinal Pipeline is an intrastate pipeline and its capacity costs are devoted entirely to North Carolina; and (2) Supplier reservation fees are treated as commodity costs in North Carolina and as demand costs in South Carolina. However, these costs are 100% recoverable in both states. We agree with the Consumer Advocate. To eliminate the major difference between jurisdictions, the Commission finds, with the effective date of new rates in this docket, that the Company should treat supplier reservation fees as commodity costs rather than demand costs for gas cost recovery purposes.

1. The issue relating to the allocation of gas demand charges in this proceeding is an issue of the allocation of costs between jurisdictional and non-jurisdictional customers. There is no single correct way to allocate such costs. The FERC has considered the allocation of costs among jurisdictional and non-jurisdictional customers on many occasions and has approved many different allocation methods. See, e.g., Re Atlantic Seaboard Corporation, 11 FPC 43 (1952) (50% of fixed costs assigned on the basis of annual deliveries and 50% on the basis of peak deliveries); Re United Gas Pipe Line Company, 3 PUR 4<sup>th</sup> 491 (1974) (75% of fixed costs assigned on the basis of annual deliveries and 25% on the basis of demand); Re Tennessee Gas

Pipeline Company, 103 PUR 4<sup>th</sup> 179 (1989) (approving a two-part demand rate, including a D-1 charge in which 50% of fixed costs are classified to the demand charge based on a three-day peak usage and a D-2 charge in which the other part of fixed costs is classified to the demand charge on the basis of the customers' annual requirements); Re Paiute Pipeline Company, 61 FERC ¶61,061 (1992) (50% of fixed costs related to return on equity and related taxes are classified to the usage component of rates); Re Panhandle Eastern Pipe Line Company, 134 PUR4th 383 (1992)(all fixed costs allocated to a service are added together and divided by the contract demand and a representative interruptible volume figure to obtain the demand billing unit); Re Gasdel Pipeline System, Inc., \_\_ PUR 4<sup>th</sup> \_\_, (Docket No. RS92-62-000, 1993) (both firm and interruptible customers pay identical one-part rates).

2. The allocation of costs is not an exact science; it is a matter of judgment. <u>See</u>, <u>Colorado Interstate Gas Co. v. Federal Power Commission</u>, 65 S.Ct. 829, at 833 (1945), where the United States Supreme Court stated the following:

"Allocation of costs is not a matter for the slide rule. It involves judgment on a myriad of facts. It has no claim to an exact science."

The Supreme Court went on to say that "considerations of fairness, not mere mathematics, govern the allocation of costs."

3. The question before this Commission is whether the allocation method historically used by this Commission fairly assigns gas demand costs to the Company's South Carolina customers, and prevents over or under-recovery. The Commission finds that it does not. As stated above, the allocation of costs involves judgment on a myriad of facts. In addition, this Commission has considered the fact that it would be impracticable for this Commission to allocate costs in such a manner that the Company would recover exactly 100% of all of its costs. Such a goal could only be reached if the Company's rates were established on the same test

period by the three commissions regulating the Company and if all three commissions used the identical method of allocating all costs and expenses, not just gas demand costs.

This Commission holds that, in our judgment, the record in this proceeding does justify such a change to the design day methodology, for the reasons espoused by Consumer Advocate witness Watkins. We agree that the allocation of gas demand costs to South Carolina on the basis of annual sales volumes does not reasonably relate to cost causation. (See Tr., Vol. 1, Watkins at 306-307.) Further, we believe that adoption of the design day demand methodology, supported by Consumer Advocate witness Watkins (and Staff witness Spearman on cross-examination) helps to ensure against overrecovery of gas costs on a North and South Carolina basis, since this method is identical to North Carolina's method. (Id. at 307-309.) We agree that the ratio of 22.3% used by Consumer Advocate witness is appropriate for use in this proceeding for the allocation of fixed demand costs to South Carolina based on a design day methodology. We also agree that to insure the proper recovery of fixed demand costs, the percentage should be fixed as requested by the Company.

For the foregoing reasons, the Commission finds and concludes that the Company's and the Staff's original adjustment to cost of gas is inappropriate and should be denied. The Consumer Advocate's adjustment of \$3,255,844 is adopted.

# C. Adjustments to Operations and Maintenance Expenses.

The Staff proposed a number of adjustments to operations and maintenance (O&M) expenses that differ from the Company's filing. These adjustments include (a) an adjustment to annualize wages and salaries, (b) an adjustment to the expenses associated with the Company's Payroll Investment Plan and Salary Investment Plan based on pro forma wages and salaries, (c) an adjustment to the cost of risk insurance, (d) an adjustment to pension expense, (e) an

adjustment to uncollectibles based on pro forma revenues, (f) an adjustment to DSM costs, (g) an adjustment to amortize deferred environmental costs, (h) an adjustment to allocate a portion of certain expenses to non-utility activities, (i) an adjustment to rate case expenses, (j) an adjustment to the expenses for the Long-Term Incentive Plan, (k) an adjustment to group insurance expenses, (l) an adjustment for postage expenses, (m) an adjustment to eliminate certain hedging employee expenses, and (n) an adjustment to eliminate certain expenses that the Staff contends are not properly allowed for ratemaking purposes. Each of these adjustments is detailed in the Commission Staff Report and in the testimony of Staff witness Norbert Thomas.

The Consumer Advocate also proposed adjustments to various O&M expenses, including adjustments to risk insurance, pension expenses, uncollectible expenses, DSM expenses, environmental expenses and group insurance expenses.

At the hearing, the Company agreed to some of the adjustments proposed by the Staff, but disagreed with most of the Staff's adjustments. Nevertheless, the Company agreed that for purposes of this rate case, it would accept all of these adjustments if the Company received a total rate increase of approximately \$8.9 million plus recovery of its DSM costs. However, since we do not propose to allow \$8.9 million in this case, we will discuss the Company adjustments as originally proposed by them, and weigh their merits against the merits of the Staff's and Consumer Advocate's proposed adjustments.

The following table shows the adjustments to O&M expenses proposed by the Company (as amended at the hearing), the Staff (as amended at the hearing) and the Consumer Advocate.

## **O&M** Expense Adjustments

			Consumer
	Company	Staff	Advocate
Payroll	\$ 777,642	\$ 618,484	\$ 777,642
Salary and Payroll Investment			
Plans	39,373	35,087	39,373
Risk Insurance	143,708	58,084	64,211
Pension Expense	613,532	188,667	236,524
Uncollectibles	(213,188)	(213,188)	(183,307)
DSM Costs	152,329	152,329	1,142,573
Deferred Environmental Costs	613,249	367,196	228,792
Non-Utility Activities	(20,149)	(20,149)	(16,892)
Deferred Rate Case Expenses	55,000	26,912	33,000
Long-Term Incentive Plan (LTIP)	259,095	259,095	341,200
Dividend Equivalent Portion of			
LTIP	17,765	17,765	17,765
Group Insurance	266,035	139,527	144,580
Postage	(62,457)	(62,457)	(62,457)
Hedging Personnel Costs	0	0	71,564
"Non-Allowables"	<u>(15,501)</u>	(125,095)	<u>0</u>
Total O&M Expense Adjustments	<u>\$2,626,433</u>	<u>\$1,442,257</u>	\$2,834,567

### 1. Payroll Expenses.

Both the Company and the Staff proposed to increase O&M expenses to annualize payroll costs. The Company used annualized payroll expense at January 31, 2002 and projected wage increases expected to be incurred through August 31, 2002. The Company's total wages allocated to O&M expenses were \$11,951,915. The Company's per book wages charged to operations were \$11,174,273, resulting in an adjustment of \$777,642. Staff annualized actual payroll expense at June 30, 2002, resulting in an amount applicable to operations of \$11,792,757, or an increase to wages of \$618,484, excluding officer salary increases during the test year. The Company also computed payroll taxes of \$929,688 applicable to operations related to total South Carolina pro forma payroll. Per book payroll taxes charged to operations were \$859,471, resulting in an adjustment of \$70,217. Staff computed an adjustment for payroll taxes applicable

to operations of \$46,745 based on annualized wages at June 30, 2002. The difference in payroll taxes between the Company and the Staff is due, in part, to the use of a different wage base for computing South Carolina unemployment taxes.

The Company contended that it is appropriate to use the August 31, 2002 payroll since it is known and measurable. The Company also contended that the exclusion of officer salary increases during the test period is inappropriate since there is nothing in the record to justify such an exclusion.

The Consumer Advocate did not propose an adjustment to the Company's pro forma payroll expenses.

Since no other party offered any evidence as to the appropriate payroll expense, the Commission finds that the Staff's proposal is appropriate for the purposes of this proceeding, since it is more reflective of a known and measurable change to test year operations. The Company used projected data, not actual data like the Staff.

# 2. Salary and Payroll Investment Plans.

The Company and the Staff proposed to adjust O&M expenses to annualize Salary and Payroll Investment Plan expense for the effect of annualized wages and salaries. Under the Plan, participants defer a portion of their base salary and the Company matches each participant's deferral by contributing \$.50 for every \$1.00 of the first 10% of base salary deferred. The Company's and the Staff's adjustments were computed by including total test year Company-matching contributions to the Plan divided by total payroll expense and applying that ratio to pro forma payroll expense. The Company computed a pro forma amount applicable to operations of \$366,996, and Staff computed an amount of \$362,711. Deducting the per book expense of \$327,624 results in an adjustment of \$39,373 for the Company and \$35,087 for the Staff. The

Consumer Advocate did not propose an adjustment to the Company's pro forma Salary and Payroll Investment Plan expense.

The difference between the amounts calculated by the Company and the Staff relate to the fact that they used different amounts for payroll expenses as discussed above. Since the Commission has accepted the Staff's payroll expenses, it is appropriate that the Commission accept the Staff's adjustment to Salary and Payroll Investment Plan expense.

## 3. Risk Insurance Expense.

The Company proposed to increase O&M expenses for the projected costs of renewing risk insurance premiums for fiscal 2003. Included are premiums for general and auto liability, worker's compensation, property insurance, and other items. These items are set forth in Hearing Exhibit \_\_ (GAW-1), Schedule 4, Page 2 of 8, Column 1. The Company's projections show an increase in premiums of \$810,538, with \$143,708 being allocated to South Carolina. The Staff proposed to annualize insurance expense using the most recent insurance premiums paid for a total amount of \$1,721,651 less the per book amount of \$1,394,049, for a net increase in premiums of \$327,602, with \$58,084 being allocated to South Carolina.

The Consumer Advocate proposed to adjust test year risk insurance premiums to the current annualized premium levels paid by the Company, resulting in an adjustment of \$64,211.

The Company contended that the lower pro forma increases for risk insurance proposed by the Staff and the Consumer Advocate fail to recognize the increases the Company is facing in its risk insurance premiums. In support of its contention, Company witness Guy testified that one only needs to read the newspaper to know that premiums for risk insurance are rapidly increasing, due in large part to the events of September 11, 2001. The Commission believes that the risk insurance expenses proposed by the Company are not yet fully recognized by actual

premiums paid, and therefore are not known and measurable and that recovery of these increased expenses should be not allowed in this rate case. Staff's adjustment is adopted, since it is based on actual figures, and not projections.

#### 4. Pension Costs.

The Company and the Staff proposed to increase O&M expenses for the effect of annualizing pension costs. The Company proposed to adjust pension expense to include the actuary's latest estimate of pension expense for fiscal 2003 which ends in October 2003. According to the actuary, the asset return assumptions under the plan warrant adjustment due to market conditions that will impact future expenses. In Piedmont's original filing, total pension expense was projected by the actuary to be \$3,690,000, with \$550,737 being allocated to South Carolina. Per book pension expense was a credit of \$150,854 due to expenses being offset by earnings from plan assets, for a total adjustment to pension expense of \$701,590.

Staff proposed to adjust pension expense based on the actuary's most recent updated pension expense of \$253,355 for fiscal 2002, with \$37,813 being allocated to South Carolina. Deducting the per book credit of \$150,854 produces an adjustment of \$188,667. Staff was of the opinion that projections for fiscal 2003 would include estimates for 19 months beyond the test year that are not known and measurable changes to test year operations. Staff contended that projections of earnings from the plan and expected returns on plan assets are subject to market conditions and could vary greatly from the actuary's assumptions. For these reasons, Staff did not include changes to the test year beyond fiscal 2002.

The Consumer Advocate proposed to base the Company's pension expense on projected amounts using an early estimate for fiscal 2002 of \$574,000. While recognizing that current investment returns are clearly lower than the returns enjoyed a few years ago, Consumer

Advocate witness Watkins contended that the actuary's assumption of market performance during 2003 is conjecture.

On rebuttal, the Company offered testimony to show that the Company had adopted a new long-term investment return component of its pension expense that has the effect of reducing the amount of total company cost originally filed by \$590,000. Using this revised expected return on investment, the Company computed an adjustment to test period expense of \$613,532, or a decrease of \$88,058 from the filed amount. In support of this projected expense, the Company introduced as Hearing Exhibit 20 (BLG-2) a copy of the information provided by the Company's independent actuaries.

The Commission finds that projections for 19 months beyond the test year are estimates at best and not known and measurable changes to test year operations. The Consumer Advocate's adjustments are somewhat conjectural, since they are based on an early estimate for fiscal year 2002. The Commission adopts Staff's adjustment, since its projections do not go beyond fiscal 2002.

### 5. Uncollectibles Expense.

Both the Company and the Staff proposed to reduce uncollectibles expense by \$213,188. The Consumer Advocate proposed a reduction of \$183,307. The Consumer Advocate explained, however, that he did not disagree with the percentage used by the Company to compute uncollectibles expense, and that the difference related solely to the difference in revenues computed by the Company and the Consumer Advocate. Since the Commission has adopted the revenues supported by the Company and the Staff, it is appropriate to apply the agreed upon percentage to their revenue number; therefore, the Commission accepts the uncollectibles expense adjustment proposed by the Company and the Staff.

## 6. Demand-Side Management (DSM) Costs.

The Commission, in Docket #95-715-G, Order #98-811 dated October 26, 1998, ordered the Company to accumulate all costs related to DSM in a regulatory asset account with accrued interest at the approved overall rate of return to be recovered through the amortization of such costs in the Company's next general rate case upon the demonstration of a cost/benefit analysis for such expenses. The balance in the regulatory asset account at January 31, 2002, was \$5,578,070. Of this amount, \$2,129,060 related to carrying costs since May 1995 at the approved overall rate of return of 10.77%. Staff verified all interest computations and the per book costs during their field audit at the Company. Also included in the Company's adjustment was a projection of additional DSM costs to be incurred beyond the test year through October 31, 2002, of \$587,377, including interest.

None of the parties objected to the Company's recovery of its DSM costs; however, they did differ as to how these costs should be recovered. As set forth above, the Company proposed to amortize these costs over a three-year period. The Consumer Advocate proposed to amortize these costs over a five-year period. The Staff proposed to include the actual test year DSM costs incurred of \$152,329 as an ongoing level of expenses. Staff recommended that the Company transfer the balance in the regulatory asset account at June 30, 2002, of \$5,953,217 to the deferred cost of gas account 25304.

After careful consideration, the Commission adopts the Consumer Advocate's proposal, since it amortizes the actual balance as of June 30, 2002 over a five year period, which is the average length of time between the Company's last four rate cases. The Consumer Advocate's adjustment is \$1,142,573.

We must conclude that transferring the amount to the deferred cost of gas account as

suggested by the Staff is inappropriate at this time. It is not unusual for items other than gas costs to be included in the deferred cost of gas account. For example, amounts related to the negotiation of industrial rates and to the weather normalization adjustment formula are already included in this account. However, to the extent possible, the account should be restricted to expenses related to cost of gas.

#### 7. Amortization of Deferred Environmental Costs.

The Company proposed to increase expenses to reflect a three-year amortization of deferred environmental costs of \$1,845,397, or \$615,132 per year. After deducting per book amortization of \$1,883, which was the amortization approved by the Commission in Docket No. 95-715-G, an adjustment of \$613,249 was computed. The majority of these costs result from a settlement payment to Duke Energy Corporation in 1997 of \$5,250,000, which represented Piedmont's share of a nine-site remediation settlement. Three of the nine sites covered in the settlement are located in South Carolina, and since no site-specific information was determined in the settlement, the Company and the Staff allocated the settlement cost equally among the nine sites. The amount of the settlement attributable to South Carolina is \$1,750,000. The Company has additional unamortized environmental costs of \$95,397 consisting of legal fees, engineering, research, etc., for a total amount to be recovered of \$1,845,397.

The Staff proposed a five-year amortization of the \$1,845,397, or \$369,079 per year less the per book amount of \$1,883 for an adjustment of \$367,196.

The Consumer Advocate proposed an eight-year amortization of the \$1,845,397, or \$230,675 per year less the per book amount of \$1,883 for an adjustment of \$228,792.

All parties appear to be in agreement that the Company is entitled to recover its deferred environmental costs. The only issue raised by the parties is the length of the amortization period,

with the Company proposing a three-year amortization period, the Staff proposing a five-year amortization period and the Consumer Advocate proposing an eight-year amortization period.

The selection of the proper amortization period is a matter of judgment, involving a number of factors. A shorter amortization period would have a greater immediate impact on rates, but would permit the Company to recover its deferred environmental costs sooner. A longer amortization period would have a lesser immediate impact on rates, but would extend the time over which the Company recovers its deferred costs and, as a result, would increase the cost of carrying these deferred costs on the Company's books. In connection with the latter point, the Commission notes that the Company has been carrying the majority of these deferred costs since 1997; therefore, the Company has already incurred carrying costs for approximately five years.

The Commission accepts the Staff's recommended five-year amortization period and the resulting adjustment to O&M expenses.

In making this decision, the Commission is aware that in Docket No. 94-008-G, it approved an environmental cleanup cost factor for the recovery of environmental costs for South Carolina Electric and Gas Company. The Commission does not believe that decision should be precedent for its action in this case. The South Carolina Electric and Gas Company case was decided in 1994, and the applicant in that case is continuing to recover these costs since the estimated liability has changed over time.

In the Commission's judgment, the use of a five-year amortization period is appropriate in this case, because it represents the approximate average time between the Company's last four rate cases. See, e.g., Re Matanuska Telephone Association, Inc., \_\_ PUR4th \_\_, (Regulatory Comm'n of Alaska, 2000) where the Regulatory Commission of Alaska concluded the following:

"A utility should be allowed to recover the best estimate of its expense on a prospective basis. The amortization period should reflect the best estimate of when the utility will file its next rate case. The amortization and recovery of expense should be matched with the most reasonable estimate of the benefit associated with the expense; that is the number of years between rate cases."

## 8. Non-Utility Activities.

The Company and the Staff proposed to allocate a portion of administrative and general expenses to non-utility operations. According to the Company, charges are made directly to these activities for labor, materials issued from inventory, direct charges at the time of purchase, office space based on square footage, and other costs. The Company proposed to reduce O&M expenses by \$16,892 to allocate administrative and general expenses to non-utility operations that could not be assigned to South Carolina gas operations. This allocation was made using the "Massachusetts" formula which is a three-factor formula consisting of property, payroll, and revenues. The Staff's adjustment of \$20,149 differs from the Company's adjustment due to inclusion of jobbing revenues in the formula for calculating the non-utility percentage applied to allocable expenses. At the hearing, the Company agreed to the Staff's adjustment, and since no other party opposed the Staff's adjustment, the Commission finds the Staff's adjustment for non-utility activities to be fair and reasonable.

### 9. Amortization of Rate Case Expense.

The Company, the Staff and the Consumer Advocate all proposed to adjust expenses for the amortization of current rate case expenses. The Company proposed a three-year amortization of estimated rate case expenses of \$165,000, or an adjustment of \$55,000. The Consumer advocate accepted the Company's estimated expenses of \$165,000 but proposed a five-year amortization, or an adjustment of \$33,000. The Staff proposed a five and one-half year amortization, based on the average number of years between the two previous rate case filings

before the Commission (1991 and 1995). In addition, the Staff proposed to reduce rate case expenses by \$16,986 to reflect amounts not yet paid. Applying a five and one-half year amortization period to the resulting \$148,014 produces an adjustment of \$26,912.

The Commission accepts the Staff's adjustment relating to rate case expenses since it is more representative of the actual time period between rate cases.

## 10. Long-Term Incentive Plan.

The Company and the Staff propose to increase expenses for the long-term incentive plan that is designed to provide compensation packages for officers and key executives to attract and retain persons of outstanding ability and to provide greater incentives for employees to make material contributions to the success of the Company. The Company included the estimated expenses remaining for Award No.5 which is for a five-year period ending October 31, 2003. This estimated expense was based on 241,672 units times an estimated market price per share of \$35.00. The Company also included the estimated expenses to be incurred for Award No.6 that the Company will begin recording in fiscal 2004, and amortized the total amount over a fouryear period for an annualized amount of \$633,654 attributable to South Carolina. After deducting the per book expense of \$292,454, the Company made an adjustment of \$341,200. The Staff computed expenses for the long-term incentive plan based on 241,672 units in Award No. 5 times the market price of \$36.98 as of the last trading day in June 2002 amortized over a threeyear accrual period, for an annual amount applicable to South Carolina operations of \$551,549. This calculation produced an adjustment of \$259,095 after deducting the per book expense of \$292,454. The Company agreed to accept the Staff's adjustment. No party offered any evidence to oppose this adjustment, and the Commission finds the adjustment to be fair and reasonable.

## 11. Group Insurance.

The Company proposed to adjust O&M expenses for projected group health insurance premium increases of \$267,255 to take effect in January 2003. The Company also proposed to eliminate per book credits of \$54,423 made during the test year for correcting entries, for a total projected increase of \$321,679. This amount was offset by computed credits to Account 92204 of \$55,644 for an adjustment of \$266,035.

The Consumer Advocate annualized Piedmont's "current health insurance premiums to adjust the actual test year amount" and proposed an adjustment of \$144,580.

The Staff's adjustment of \$139,527 was computed based on annualized premium expense for the month of May 2002 allocated to South Carolina of \$168,715 including elimination of per book credits mentioned above. This amount was offset by computed credits to Account 92204 of \$29,188 for an adjustment of \$139,527.

On rebuttal, the Company offered evidence to show that it filed projected cost increases based on information from independent insurance consultants that showed costs will be substantially higher than historical amounts. A copy of the information received from those independent insurance consultants was introduced into evidence as Hearing Exhibit 20 (Exhibit BLG-3). The Company testified that it believed that the increased costs will be effective shortly after the date new rates in this proceeding go into effect and, therefore, should be allowed in cost of service. The Company further testified that although it is doing all it can to contain these costs, medical costs are a part of the total compensation and benefits package that must be maintained to attract and retain employees who serve its customers.

The Commission accepts the Staff's adjustment relating to group insurance expenses as being a known and measurable change to test year operations. The Commission does not believe

that projections into fiscal year 2003 by the Company's consultants meet the known and measurable test. Further, the Staff's proposal took into account more factors than did the Consumer Advocate's adjustment.

## 12. Natural Gas Hedging Program

The Company proposed to increase O&M expenses for the incremental costs related to the recently approved experimental natural gas hedging program, approved by us in Order No. 2002-223. The costs included \$71,564 for additional personnel, including employee benefits to adminster the program. Staff noted that the additional personnel had not been hired, therefore Staff proposed no adjustment. We agree with the Staff and hold that no adjustment is appropriate, since no employees for the program had been hired.

#### 13. Non-Allowables.

The Staff proposed to eliminate O&M expenses that the Staff considers to be non-allowable for ratemaking purposes. The disallowed expenses include service awards, donations, institutional and goodwill advertising, civic club dues, membership fees, and the lobbying portion of American Gas Association dues. Staff is of the opinion that these items are more properly chargeable to below-the-line operations for ratemaking purposes. Staff's adjustment is a reduction in O&M expenses of \$125,095. The Company agreed with only \$15,501 of the adjustment.

Since no other party offered any evidence on the adjustment proposed by the Staff, the Commission accepts the Staff's adjustment relating to "non-allowables," since these items were truly not related to the provision of gas utility services.

## D. Adjustment to Depreciation Expense.

The Company proposed total pro forma depreciation expense of \$10,077,377. Per book depreciation expense totals \$9,147,512, resulting in an increase to depreciation expense of \$929,865. Pro forma depreciation expense consists of annualized depreciation expense of \$9,759,518, or an increase of \$612,006, based on plant-in-service at the end of the test year and depreciation rates as proposed by the Company. These proposed depreciation rates are the result of a depreciation study that was included as part of the Company's application, and was based on depreciable property in service as of October 31, 1998. The Company's adjustment also includes annualized depreciation expense of \$317,859 based on budgeted plant additions of \$10,016,107 projected to be completed at August 31, 2002, for a total adjustment to depreciation expense of \$929,865.

The Staff computed depreciation expense of \$9,960,789, or an increase to per book depreciation expense of \$813,277 based on plant-in-service at June 30, 2002, which includes actual plant additions from the end of the test year through June 30, 2002. The Staff's adjustment includes the depreciation rates proposed by the Company and recommended by the Commission's Utilities Department.

No party opposed the depreciation rates proposed by the Company and recommended by the Commission's Utilities Department, and the Commission finds these depreciation rates to be just and reasonable for use in this proceeding. The differences in the depreciation expenses proposed by the parties relates solely to the differences in plant-in-service to which these rates are applied. Since in a following section of this order, the Commission adopts the plant-in-service proposed by the Staff, it is appropriate that the Commission apply the approved

depreciation rates to that plant-in-service to obtain an approved depreciation expense of \$9,960,789.

## **E.** Adjustment to Property Taxes.

The Company proposed to adjust property taxes based on South Carolina direct plant-in-service at January 31, 2002, and projected South Carolina direct additions to plant-in-service, CWIP and accumulated depreciation as of August 31, 2002. The Company computed total net property subject to South Carolina property taxes of \$191,980,190. Using the latest assessment ratio from the South Carolina Department of Revenue and the ratio of taxes paid to assessed value, the Company computed property taxes of \$4,660,228. After deduction of per book property taxes, the Company computed an adjustment of \$1,062,701. The Staff's adjustment is based on South Carolina direct plant-in-service at January 31, 2002, and actual South Carolina direct additions to plant-in-service through June 30, 2002, resulting in South Carolina net plant subject to property taxes of \$179,127,207. Staff used the same assessment ratios as the Company to compute annualized property taxes of \$4,348,226 less the per book amount of \$3,597,527 for an adjustment of \$750,699. No other party offered any evidence with respect to the proper amount of property taxes.

As shown above, the difference between the property taxes computed by the Company and the Staff relates to the fact that the Company calculated property taxes on projected plant-inservice at August 31, 2002; whereas, the Staff calculated property taxes on plant-in-service at June 30, 2002.

Since in a following section of this order, the Commission adopts the plant-in-service proposed by the Staff, it is appropriate that the Commission determine property taxes based on that plant-in-service; therefore, the Commission finds that the appropriate amount of property

taxes for use in this proceeding is \$4,348,226, from which should be deducted the per book amount of \$3,597,527 to arrive at an adjustment to property taxes of \$750,699.

## F. Adjustment to General Taxes.

The Company proposed to adjust general taxes to reflect the pro forma utility license fee of \$422,003, based on a rate of 0.3% times "as adjusted" operating revenues. Such computation produces an adjustment of \$126,922 after deducting the per book amount of \$295,081. Staff has, additionally, included a gross receipts taxes factor of .001458 based on the latest Commission assessment factor, for a total factor to be applied to "as adjusted" operating revenues of .004458. This factor, when applied to "as adjusted" operating revenues, produces pro forma gross receipts taxes and utility license fee of \$627,097. After deducting per book amounts of \$295,081 for utility license fee and \$225,073 for gross receipts taxes totaling \$520,154, the Staff computed an adjustment of \$106,943. At the hearing, the Company agreed to the Staff's proposed adjustment to general taxes.

The Consumer Advocate's proposed adjustment to general taxes is shown on Schedule 5 to Hearing Exhibit 14 (Exhibit GAW-1). Consumer Advocate witness Watkins testified that his proposed general taxes differ from the Company's amounts due to the differences in revenue computed by the Company and the Consumer Advocate.

Based on the revenues found to be appropriate in a later section of this Order, the Commission finds and concludes that the Staff's proposed adjustment to general taxes of \$106,943 is appropriate.

### G. Adjustment to Income Tax Expenses.

The Company and the Staff proposed to adjust state and federal income taxes based on taxable income after adjustments. The Company decreased income taxes by \$2,136,582 as

compared with Staff's increase to income taxes of \$264,720 resulting from the tax effect of Staff's accounting and pro forma adjustments.

The Consumer Advocate's proposed adjustment to income tax expense is shown on Schedule 6 to Hearing Exhibit 14 (Exhibit GAW-1). Consumer Advocate witness Watkins testified that his proposed income tax expense differs from the Company because of different revenue and expense adjustments as well as the result of interest synchronization. He further testified that the difference related to interest synchronization results from the fact that the Company and the Consumer Advocate used different capital structures.

Based on the revenues, expenses and capital structure found to be appropriete in later sections of this Order, the Commission finds and concludes that the adjustment to income taxes appropriate for this proceeding is a decrease of \$114,048.

## H. Adjustment to Interest on Customers' Deposits.

Staff proposed to annualize interest on customers' deposits at the Commission-approved rate of 8%. Staff computed annualized interest of \$169,712 based on customers' deposits as of January 31, 2002. Staff deducted per book interest on customers' deposits of \$154,450 which produced an adjustment of \$15,262. The Company proposed no adjustment to interest on customers' deposits; however, at the hearing, the Company agreed to the Staff's adjustment. No other party offered any evidence on this issue; therefore, the Commission finds and concludes that the adjustment to interest on customers' deposits proposed by the Staff and agreed to by the Company is appropriate for use in this proceeding.

### I. Adjustment to Allowance for Funds Used During Construction (AFUDC).

The Company computed total pro forma AFUDC of \$453,197 based on a three-year average of AFUDC recorded for the years ended January 31, 2000 through January 31, 2002.

This three-year average is exclusive of AFUDC attributable to "sparsely-populated" projects. Deducting per book AFUDC of \$1,372,012 results in a reduction of \$918,815. The Company receives requests for main extensions into "sparsely-populated" areas for various reasons, including economic development initiatives. Since it is uneconomical to do so in certain instances, the Company requested and received permission from the Commission to accrue AFUDC on these "sparsely-populated" projects at the approved rate of return on common equity until its next general rate case. The Company normally accrues AFUDC based on a 12-month average of the short-term interest rate. The Company has eliminated the additional AFUDC booked in the test year related to "sparsely-populated" projects since the Company will cease accrual of AFUDC when new rates from this rate case become effective.

The Staff computed pro forma AFUDC of \$584,230 based on AFUDC recorded during the test year relating to the remaining CWIP that Staff has included in rate base that has not been completed and transferred to plant-in-service. The Staff deducted per book AFUDC of \$1,372,012, resulting in a reduction of \$787,782. The Staff's pro forma AFUDC is exclusive of AFUDC related to completed "sparsely-populated" projects and any other projects that have been completed and transferred to plant-in-service as of June 30, 2002.

At the hearing, the Company agreed to the Staff's adjustment, and no other party offered any evidence on this issue.

There being no objection to the adjustment to AFUDC proposed by the Staff and agreed to by the Company, the Commission finds and concludes that this adjustment is appropriate for use in this proceeding.

## J. Adjustment for Customer Growth.

The Company and the Staff proposed to adjust for customer growth using a formula approved by the Commission to recognize the increase in the number of customers during the test year. The Company computed a customer growth factor of 0.18% per books and applied this factor to per book net operating income. The Company applied a factor of 1.5 to recognize growth beyond the test year, while the Staff applied a factor of 1 and 5/12ths to recognize customers as of June 30, 2002. The Company's customer growth, as adjusted, is \$28,882, or an increase of \$3,482 to the per book amount. Staff's customer growth, as adjusted, is \$35,842, for a decrease to Staff's per book amount of \$59.

The Consumer Advocate accepted the 0.18% growth factor used by the Company and the Staff to compute growth for the test period; however, he computed a growth factor of 0.52% for the growth from the end of the test year to June 30, 2002, as compared with the Company's 0.27% factor  $(0.18\% \times 1.5)$  and the Staff's 0.26% factor  $(0.18\% \times 1.5)$ .

As indicated above, the difference in the growth factors used by the Company and the Staff results from the fact that the Company used a factor of 1.5 to recognize growth subsequent to the test period; whereas, the Staff used a factor of 1 and 5/12ths. The Staff used 1 and 5/12ths to recognize the fact that five months or 5/12ths of a year are included in the period from the end of the test period to June 30, 2002, the date used by the Staff for many of its adjustments in this proceeding.

The Consumer Advocate obtained his growth rate for the five months subsequent to the test year by multiplying the growth rate from April 2001 to April 2002 of 1.256% by 5/12ths to obtain a growth factor of 0.52%.

After careful consideration, the Commission finds and concludes that the growth rate determined by the Staff is logically based on the number of customers and the number of months between the end of the test year and June 30, 2002. Therefore, the Commission finds and concludes that the growth rate determined by the Staff is appropriate for use in this proceeding, and that customer growth as adjusted is \$34,275, or decrease to the per book amount of \$1,626.

#### V. RATE BASE.

For ratemaking purposes, the rate base is the total net value of the gas utility's tangible capital or property value on which the gas utility is entitled to earn a fair and reasonable rate of return. The rate base, as derived in this proceeding, is composed of the value of the Company's property used and useful in providing gas service to the public, materials and supplies and an allowance for cash working capital. The rate base computation also incorporates reductions for accumulated depreciation, customers' advances for construction, customers' deposits, accumulated deferred income taxes and unclaimed funds.

In accordance with its standard practice, the Accounting Department of the Commission Staff conducted an audit and examination of the Company's books and verified all account balances from the Company's general ledger, including rate base items and plant additions and retirements. On the basis of this audit, the pertinent hearing exhibits and the testimony contained in the record of the hearing, the Commission can determine and find proper balances for the components of the Company's rate base as well as the propriety of related accounting adjustments.

When the rate base has been established, the Company's total operating income for return is applied to the rate base to determine what adjustments, if any, to the present rate structure are necessary to generate earnings sufficient to produce a fair rate of return. The rate base should

reflect the actual investment made by investors in the Company's property and the value upon which stockholders will receive a return on their investment.

Although the Company and the Staff proposed different adjustments to Accumulated Depreciation, CWIP, Gas Inventory, Deferred Income Taxes and Customers' Deposits, the Company agreed to the Staff's adjustments to these items at the hearing, and no other party offered any evidence to the contrary. The following is a discussion of proposed rate base adjustments.

### A. The Components of Rate Base.

#### 1. Plant-in-Service.

The Company included total pro forma plant-in-service of \$292,539,297. This amount was determined by increasing per book plant-in-service of \$282,523,190 as of January 31, 2002, by \$10,016,107 to reflect (a) South Carolina direct budgeted plant additions of \$8,628,406 projected to be completed as of August 31, 2002, and (b) South Carolina's portion of joint budgeted plant additions expected to be completed at August 31, 2002. The later amount totaled \$6,092,984, with \$1,387,701 being allocated to South Carolina.

The Staff included total plant-in-service as of June 30, 2002, of \$286,567,874, for an increase of \$4,044,684. This adjustment includes actual plant additions since the end of the test year that have been completed and transferred to plant-in-service.

The Consumer Advocate did not propose an adjustment to plant-in-service, but agreed with the Staff that plant-in-service as of June 30, 2002, should be used.

At the hearing, the Company introduced unaudited evidence to show that at July 31, 2002, actual South Carolina plant-in-service was \$287,879,921, South Carolina accumulated

depreciation was \$89,165,404, South Carolina CWIP was \$5,511,832 and South Carolina pro forma depreciation expense was \$10,007,560.

The Commission finds that the Staff's proposal is appropriate for the purposes of this proceeding, since it included updated plant to the latest verifiable date for purposes of this proceeding.

This Commission has traditionally used the regulatory accounting methodology recognized as "original cost less depreciation" in the determination of the value of a gas utility's plant-in-service. The Commission finds and concludes that the appropriate amount of plant-in-service for use in this case is \$286,567,874 by adding Staff's adjustment of \$4,044,684 for plant additions through June 30, 2002 to plant in service per books.

## 2. Working Capital.

The Commission considers an allowance for working capital to be an appropriate item for inclusion in the rate base of a gas utility. By permitting a working capital allowance, the Commission acknowledges the requirement for capital outlay related to the routine operations of the utility. For many years, the Commission has computed the allowance for working capital to be the sum of one-eighth of operation and maintenance expenses, minimum bank balances and prepayments, reduced by the amount of average tax accruals. The Commission finds and concludes this method is appropriate for the present case as well, and that the appropriate amount of cash working capital for use in this case is \$1,796,384 determined by taking the per book figure of \$1,814,540 and applying Staff's adjustment of (\$18,156).

The calculation of cash working capital appears in Hearing Exhibit 16 (Audit Exhibit A-3). The Company and the Staff proposed to compute cash working capital based on the modified 1/8th of O&M expenses formula as approved by the Commission for electric and gas utilities.

The formula includes 12.50% of O&M expenses plus minimum bank balances and prepayments less average tax accruals. Additionally, the Company proposed to include cash working funds in the computation. The Company proposed to adjust Cash Working Capital by \$598,717 by applying the allowance rate of 12.50% to pro forma adjustments to O&M expenses. Staff removed \$10,776 from per books cash working capital to exclude cash working funds (compare Hearing Exhibit 16 (Audit Exhibit A-3) with Hearing Exhibit 1, Schedule 6) and included per book cash working capital adjusted for correcting adjustments only, or a decrease of \$18,156, in compliance with prior Commission and Court decisions.

The Consumer Advocate accepted the formula used by the Company to compute cash working capital, but obtained a different adjustment amount due to the fact that the formula was applied to the overall O&M expenses proposed by the Consumer Advocate.

The Commission accepts the Staff's adjustment and finds it to be more appropriate for use in this proceeding. Adjusting for correcting adjustments only is more reasonable from an accounting standpoint than the Company's methodology.

# 3. Customers' Deposits.

The amount representing customers' deposits also is considered by this Commission to be an element on which the Company's investors are not entitled to earn a return and which should be deducted in calculating rate base.

The Company's per book customers' deposits were \$2,121,396. The Staff proposed to increase this amount by \$15,262 following Staff's annualization of interest on customers' deposits. No party opposed this adjustment, and the Commission finds it to be appropriate.

# 4. Accumulated Depreciation.

In determining the proper rate base for gas utilities, the Commission uses the gross plant-in-service dedicated to providing public service as reduced by accumulated depreciation. This represents that portion of the utility's depreciable properties which has been consumed by previous use and recorded as depreciation. The Commission finds and concludes that the appropriate amount of accumulated depreciation for use in this case is (\$89,118,633) determined by taking the per books figure of (\$90,465,623) and applying Staff's adjustment to reflect the correct allocation factors of \$2,160,267, and applying Staff's adjustment to annualize depreciation expense of (\$813,277).

The Company agreed to Staff's adjustments to correct for allocation factors and to annualize depreciation expenses. No other adjustment to accumulated depreciation was proposed by any party.

## 5. Construction Work in Progress.

This Commission has traditionally considered the reasonable and necessary costs of construction of utility plant not yet in service to be a proper rate base item. Such costs are described as "construction work in progress" or CWIP. The Commission finds and concludes that the appropriate amount of construction work in progress for use in this case is \$5,511,832 determined by taking the per books CWIP figure of \$6,531,245, eliminating certain municipal CWIP projects using a (\$243,249) adjustment, and removing Staff's adjustment to reflect CWIP at June 30, 2002 with an adjustment of (\$776,164).

The Company agreed to the Staff's adjustments to CWIP at June 30, 2002. No other adjustment to CWIP was proposed by any party.

## 6. Materials and Supplies.

The Commission has traditionally considered "materials and supplies" to be a proper item to be included in a gas utility's rate base. The Commission finds and concludes that the appropriate amount of materials and supplies to be included in rate base in this case is \$13,443,419 determined by taking the per book figure of \$16,098,313, applying Staff's adjustment of \$4,329, and Staff's adjustment to remove gas demand charges of (\$2,659,223).

The Company agreed to the Staff's adjustment to materials and supplies at June 30, 2002. No other adjustment to materials and supplies was proposed by any party.

#### 7. Customers' Advances for Construction.

Customers' advances for construction represent a component upon which the Commission considers investors are not entitled to earn a return. The Commission finds and concludes that the appropriate amount of customers' advances for construction for use in this case is \$3,599. The Company proposed this amount, and no party proposed any adjustment to this amount.

#### 8. Accumulated Deferred Income Taxes.

Accumulated deferred income taxes constitute a form of cost-free capital, and, consequently, an element upon which the Commission considers investors are not entitled to earn a rate of return. The per books amount for accumulated deferred income taxes was \$29,307,846. The Company proposed to increase this amount by \$3,509,087 to recognize estimated changes through August 31, 2002, including the difference in book and tax depreciation based on budgeted plant additions projected to be completed at August 31, 2002. Staff proposed to recognize an increase to accumulated deferred income taxes of \$2,346,912 based on deferred taxes including actual plant additions through June 30, 2002. At the hearing, the Company

agreed to the Staff's adjustment, and no party opposed the Staff's adjustment; therefore, the Commission finds and concludes that the appropriate amount of accumulated deferred income taxes for use in this proceeding is \$31,654,758, determined by taking the per books figure of \$29,307,846 and applying Staff's adjustment of \$2,346,912, which reflects changes through June 30, 2002.

## 9. Unclaimed Funds.

Unclaimed funds are cost-free capital and should not be included in rate base. The per book amount for unclaimed funds was \$321,899. No party proposed any adjustment to this amount; however, the Commission finds and concludes that this amount is the appropriate amount of unclaimed funds for use in this proceeding.

## **B.** Original Cost Rate Base

The Company's rate base for its gas operations herein adjusted and determined by the Commission to be appropriate for the purposes of this proceeding, is set forth in the following table:

**Original Cost Rate Base** 

Plant-in-Service	\$286,567,874
Accumulated Depreciation	(89,118,633)
Net Plant-in-Service	197,449,241
Construction Work in Progress	5,511,832
Materials and Supplies	13,443,419
Cash Working Capital	1,796,384
Customers' Advances for Construction	(3,599)
Customers' Deposits	(2,136,658)
Accumulated Deferred Income Taxes	(31,654,758)
Unclaimed Funds	(321,899)
Total Rate Base	<u>\$184,083,962</u>

#### VI. CAPITAL STRUCTURE

The Company proposed a pro forma capital structure as of August 31, 2002, and the Staff proposed the actual capital structure as of June 30, 2002, determined as follows:

## **CAPITALIZATION**

Long-Term Debt	\$503,037,860	45.10%
Common Equity	612,295,402	54.90%
Total	\$1,115,333,262	<u>100.00%</u>

The Consumer Advocate recommended the capital structure the Company filed in its current North Carolina rate case in Docket No.G-9, Sub 461, consisting of 43.57% Long-Term Debt, 3.35% Short-Term Debt and 53.08% Common Equity.

The Commission finds and concludes that the capital structure recommended by the Staff, and agreed to by the Company, is appropriate for use in this proceeding for the following reasons:

- 1. The use of a capital structure as of June 30, 2002, is consistent with the date used for certain rate base items, such as plant-in-service, and expense items, such as payroll costs.
- 2. At no month-end subsequent to January 31, 2002, through June 30, 2002, did the Company have any short-term debt outstanding.
- 3. The Company uses short-term debt due to timing differences between the payment of its costs and the collection of its revenues. This use is not similar to the financial requirement for long-term capital needed to construct and support the physical assets used to serve retail gas customers.

The Commission also observes that the capital structure approved in this case is virtually the same as the 45.81% Long-Term Debt, 54.19% Common Equity capital structure approved in the Company's most recent rate case.

#### VII. COST OF CAPITAL

### A. Long-Term Debt.

The Company proposed a pro forma embedded cost of long-term debt of 7.72% as of August 31, 2002. The Staff proposed an embedded cost of 7.71% based on the actual capital structure as of June 30, 2002. The Consumer Advocate used an embedded cost of long-term debt of 7.72% which was the embedded cost filed by the Company in its North Carolina proceeding noted above. The Commission finds and concludes that 7.71% is the appropriate embedded cost of long-term debt to use for the purpose of this proceeding.

## B. Common Equity.

Based on the adjustments approved herein, the Company's present rates would enable the Company to earn a return on common equity of 7.51%. The Company originally sought the approval of rates which would give it a reasonable opportunity to earn a return on common equity of 12.60%.

Three witnesses offered testimony on the appropriate cost of the Company's common equity. Company witness Murry testified that the current cost of the Company's common equity is 12.6%. Commission Staff witness Spearman testified that the current cost of the Company's common equity is between 11.1% and 11.6%. Consumer Advocate witness Watkins recommended a return on common equity of 9.5% to 11.00%.

In light of all relevant issues in the record of this proceeding, the Commission is of the opinion, and so finds, that a fair and proper return on common equity of 12.6%, which is

produced by additional annual revenues of \$8,381,220 for the Company's gas operations, as approved infra, is fair and reasonable.

1. Findings and Conclusions Supporting the Allowed Return on Common Equity.

In reaching its determination that a fair and proper return on common equity is 12.6%, the Commission makes the following findings of facts and conclusions:

- a. The determination of the appropriate rate of return on common equity for a public utility is not an exact science; instead, it is based upon experience and judgment.
- b. The Discounted Cash Flow ("DCF") methodology and the Capital Asset Pricing Model ("CAPM") are useful tools for determining the appropriate rate of return on common equity; however, different conclusions may result from the use of these methods depending upon the judgment of the person applying the methods.
- c. In determining the allowed rate of return on common equity, it is appropriate to consider a number of factors, including the following: the rates of return of other enterprises and the reasonable opportunities for investment therein as measured, in part, by the results of the various DCF, CAPM and comparative earnings studies; the inherent protection against competition afforded the Company through the operation of the regulatory process as tempered by the shifting risks within the natural gas industry from interstate transmission pipelines to local distribution companies ("LDCs") resulting from the restructuring of the natural gas industry; the impact of recent market conditions on the volatility of the gas market; the prices for which the Company's services must be rendered and the desirability of setting rates for a reasonable period of time; and the public demand for the growth and system expansion which is required to maintain the Company's construction program for the foreseeable future.

d. The return on common equity found appropriate in this proceeding is the point recommended by Company witness Dr. Donald A. Murry, based on his use of the DCF Model, the CAPM Model and the Risk Premium analyses to estimate the cost of common equity appropriate for the Company.

These findings and conclusions are supported by the following evidence and analysis:

- 2. Evidence Upon Which the Findings and Conclusions on Return on Common Equity are Based.
  - (a) Evidence upon which Finding and Conclusion No. a is based.

At the outset, we observe that the determination of the appropriate rate of return on common equity for a public utility is not an exact science; instead, it is based upon experience and judgment. See, Phillips, The Regulation of Public Utilities, Second Edition, 1988, pp. 380-381. See also, Parker v. South Carolina Pub. Serv. Comm'n, 280 S.C. 310,312,313 S~E.2d 290,291 (1984) ("Ratemaking is not an exact science, but a legislative function involving many questions of judgment and discretion."); Federal Power Commission v Natural Gas Pipeline Co. of America, 315 U.S. 575 (1942) ("... the Commission was not bound to the use of any single formula or combination of formulae in determining rates. It's ratemaking function, moreover, involves the making of pragmatic adjustments."); Bluefield Water Works and Improvement Co. v. Public Serv. Comm'n of the State of West Virginia, 262 U.S. 679 (1923) ("What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of fair and reasonable judgment, having regard for all relevant facts."); Re Northwestern Bell Teleph. Co., 299 Minn. 1, 27, 216 NW2d 841 (1974) ("We have previously noted that the fixing of a fair rate of return cannot be determined with precision, since it is not derived from a formula, but must be reached through the exercise of reasonable judgment . . . . "); Re The New Haven Water Company, 6 PUR4th 166 (Ct. Pub. Util, Comm'n 1974) ("The

problems involved in determining the cost of capital and its major components are in substantial measure matters of judgment. Necessarily, so many factors enter into a determination of fair rate of return that many judgments have to be made."); Re Savannah Electric and Power Company, 90 PUR4th 563 (Ga, Pub. Serv. Comm'n, 1985) ("As in most cases, the cost of Common Equity is not as easily determined as the cost of other elements of the capital structure.") See also, Southern Bell Tel. and Tel. Co. v Public Serv. Comm'n of South Carolina, 270 S.C. 590, 244 S.E.2d 278 (1978). ("In determining the appropriate cost of Common Equity the Commission must weigh the testimonies of qualified experts and exercise its collective judgment as to what cost of Common Equity, once included in the ratemaking formula, would result in the Company having the opportunity to earn a fair return for its stockholders."), Re Maui Electric Company, Ltd., t53 PUR4th 437 (Hawaii Pub. Util. Cormm'n 1994) ("The determination of a reasonable cost of equity is ultimately a matter of informed judgment."); Re Southwestern Bell Telephone Company, 42 PUR4th 89 (Kan. State Corp. Comm'n, 1981) ("As in every case, the evidence shows that estimates of cost of capital are largely a matter of judgment."); Re Trans-Canada Pipe Lines Ltd., (NEB. December 1971), pp. 62 63 ("One of the few things upon which the regulated industries, the regulatory agencies, and the courts which review their decisions have agreed is that the consideration of the two objectives, just and reasonable rates or prices to the consumer, and just and reasonable return to the regulated enterprise, is a function requiring informed and scrupulous judgment.").

Consumer Advocate witness Watkins testified as follows: "Neither the courts nor economic/financial theory have developed exact and mechanical mechanisms for precisely determining the cost of capital. This is the case since the cost of capital is an opportunity cost and is prospective looking, which indicates it must be estimated." Tr., Vol. 1, Watkins at 317. In

addition all three of the cost of capital witnesses testified that they used various means to "estimate" the appropriate rate of return on common equity for the Company, and the cost of capital witnesses for both the Consumer Advocate and the Staff offered an estimated range of appropriate returns.

Based on the above, we find and conclude that the fixing of a fair rate of return on common equity for the Company cannot be derived from a formula but must be determined through the exercise of reasonable judgment based on record evidence.

# (b) Evidence upon which Finding and Conclusion No. b is based.

All three of the cost of capital witnesses used both the DCF and the CAPM methods to estimate the appropriate cost of common equity for the Company, and all three witnesses reached different conclusions. These results differ depending upon the method used (<u>i.e.</u>, DCF or CAPM) and the measure used for growth (<u>i.e.</u>, dividends or earnings).

The Consumer Advocate's cost of capital witness Watkins testified:

"In performing analyses of the cost of common equity it is customary and appropriate to consider the results of more than one method. The analyst and/or the Commission must then decide upon the appropriate weight to give the results of each method in the determination of cost of common equity. This follows since each method requires judgment as to the reasonableness of its assumptions and inputs; each model has its own way of examining investor behavior; each model proceeds from different fundamental premises, most of which cannot be validated empirically; and each model may not at all times be representative of current investment behavior." <u>Id</u>.

With respect to the difficulties that arise from the use of the DCF method to measure cost of capital, the Company's cost of capital witness Murry testified:

"The problems with using the DCF technique to measure the cost of capital, in my opinion, arise normally from the judgments of analysts in applying the concept. Some of these problems we can readily identify because they are common points of controversy. Others arise because analysts slavishly use the theory without assessing the credibility of calculations or comprehending their implications.

Consequently, an analyst's judgment in selecting data for the analysis and interpreting the results is very important." Tr., Vol. 1, Murry at 226.

Based on the above, we find and conclude that although the DCF and the CAPM are useful tools for determining the appropriate rate of return on common equity for the Company, neither method is appropriate without further analysis.

We also note that the above finding and conclusion is consistent with the findings of other commissions. For example, in <u>New York Telephone Company</u>, 12 PUR 4th 1 (N.Y. Pub. Serv. Comm'n, 1975), the New York Public Service Commission said:

"The major item in controversy is the proper cost rate for common equity. The rate of return evidence submitted in this proceeding, reviewed in detail in the examiner's recommended decision, provides an adequate basis upon which to determine AT&T's cost of equity, notwithstanding the disparity observed in the conclusions of the various witnesses. The recommendations of these expert witnesses establish an equity cost range between 11 and 15 per cent. This relatively wide range, resulting from the conclusions of eminently qualified financial experts, serves to underscore the examiner's observation that the different techniques of measuring the cost of equity capital can provide, at best, only a useful guide for determining the fair rate of return. Clearly, there is no single mathematically precise method of ascertaining the cost of equity capital."

Likewise in <u>Re Appalachian Power Company</u>, 22 PUR 4th 548, (Va. State Corp. Comm'n, 1977), the Virginia State Corporation Commission said:

"There is a wide range in the recommendations of the rate of return expert witnesses. This relatively wide range, resulting from the conclusions of eminently qualified experts, serves to underscore what this commission has said often; viz., that notwithstanding the variety of techniques, and the sophistication thereof, for measuring the cost of equity, there is no single, mathematically precise method of ascertaining its cost. The formulation of a fair and reasonable return is an art which requires informed judgment."

Finally, in <u>Re Calgary Power Ltd.</u>, 34 PUR 4th 398 (Alberta Pub. Util. Comm'n, 1980), the Alberta Public Utilities Commission said:

"There is no mathematically or scientifically exact approach or method for the determination of the "fair return" on rate base which the board can use, particularly with respect to the fair return on that portion of the rate base which is assumed to

be financed by common equity capital. The process and conclusion is highly judgmental and the recommendations of the various expert witnesses always seem to be in the direction of their client's bias, which the board considers to be normal and expected."

In this case, as in the cases cited above, there was a wide range in the recommendations of the expert witnesses, ranging from 9.5% to 12.6%.

For all of the above reasons, we find and conclude that the DCF methodology and the CAPM are useful tools for determining the appropriate rate of return on common equity for the Company; however, different results may result from the use of these methods depending upon the judgment of the person applying the methods.

## (c) Evidence upon which Finding and Conclusion No. c is based.

The various witnesses testified on a number of factors that the Commission should consider in determining the appropriate rate of return on common equity for the Company. The factors include the following;

(1) The rates of return of other enterprises and the reasonable opportunities for investment therein as measured, in part, by the results of the various DCF, CAPM and comparative earnings studies.

In Bluefield, the United States Supreme Court said:

"A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which were attended by corresponding risk and uncertainties . . . ."

Each of the three cost of capital witnesses appear to recognize the applicability of this principle. The Company's witness testified that a "fair rate of return" means

"A return that meets the standards set by the United States Supreme Court decision in the <u>Bluefield Water Works and Improvement Company vs. Public Service Commission</u>, 262 U.S. 679 (1923) ("Bluefield") case, as further modified by the Federal Power Commission vs. Hope Natural Gas Company, 320 U.S. 591

(1944)("Hope"). It is my understanding from these decisions that a rate of return is a fair return if it provides earnings to investors similar to returns on alternative investments in companies of equivalent risk."

The Staff's witness testified that:

"Both the DCF and CAPM analyses are widely used and accepted in rate-making proceedings as conforming to the requirements set forth in the <u>Hope case</u> and are well documented in finance literature. I applied these models to Piedmont and to a group of gas distribution companies for comparison purposes." Tr., Vol. 2, Spearman at 639.

All three of the cost of capital witnesses attempted to measure the Company's cost of common equity by comparing the returns of comparable companies.

The above cited cases and testimony support our finding and conclusion that rates of return of other enterprises and the reasonable opportunities for investment therein as measured, in part, by the results of the various DCF, CAPM and comparative earnings studies are an appropriate factor for us to consider in determining a reasonable rate of return on common equity for the Company.

As hereinafter set forth in more detail, we considered the rates of return of other enterprises and the reasonable opportunities for investment therein by selecting a rate of return for the Company that is within many of the various ranges of rates of return for other enterprises as adjusted for the Company.

(2) The inherent protection against competition afforded the Company through the operation of the regulatory process as tempered by the shifting risks within the natural gas industry from the interstate transmission pipelines to the LDCs resulting from the restructuring of the natural gas industry.

Historically, LDCs have enjoyed at least some protection against competition in the distribution of natural gas to consumers in their service territories. This monopoly has provided some protection against risks. This monopoly does not mean, however, that LDCs have

historically been free from competition or free from risks. LDCs must compete with alternate fuels, other forms of energy and, more recently, with other gas suppliers.

The protection historically provided by the monopoly status of LDCs has been offset to some extent by the unbundling of the natural gas industry, which shifted some of the risks associated with the availability of gas supplies, the deliverability of gas supplies, competition from other suppliers of gas and transportation, regulatory treatment of gas purchases and unregulated market prices for gas purchases.

All three of the cost of capital witnesses appear to recognize that the cost of capital and the related rate of return on common equity were affected by the risks of investing in the entity for whom the cost of capital or the rate of return is being determined; therefore, we find and conclude that the limited protection against competition afforded the Company through the operation of the regulatory process as tempered by the shifting of risks within the natural gas industry from interstate transmission pipelines is an appropriate factor for us to consider in determining the reasonable rate of return on common equity for the Company.

# (3) The impact of recent market conditions on the volatility of the gas market.

The Company's cost of capital witness Murry testified that the sudden evaporation of a great deal of wealth in the financial markets and the loss of confidence in financial reporting have had a sobering effect on investors and can only increase the risks perceived by investors and increase the cost of raising capital. Tr., Vol. 1, Murry at 235. He also testified that the restructuring of the cash market has added volatility to the gas market, leading to added gas acquisition risks and costs. <u>Id.</u>

Dr. Murry also testified that at least four investment groups have downgraded their recommendations for Piedmont's common stock in recent months, and that one investment firm

has just recently advised investors to shift out of the Company's common stock, along with investments in other LDCs. Id. at 236.

No other witness offered any credible evidence to dispute Dr. Murry's conclusions that current market conditions have added an additional element of risk for investors in the Company's common stock; therefore, we believe that it is appropriate to allow Piedmont an opportunity to earn a return at the upper end of a reasonable range of returns.

(4) The prices for which the Company's services must be rendered and the desirability of setting rates for a reasonable period of time.

The prices for which the Company's services must be rendered and the desirability of setting rates for a reasonable period of time are relevant to the appropriate rate of return in several ways. As stated in <u>Federal Power Commission v. Hope Natural Gas Company</u>, 320 U.S. at 602-603 (1943), "[T]he fixing of just and reasonable rates involves a balancing of the investor and the consumer interest." Furthermore, if the rates are high, consumers will turn to other sources of energy and, thereby, increase the risks to the Company. If rates are too low, the Company will be unable to recover its costs, including a reasonable return for investors, and the Company will be unable to raise capital to maintain and extend its services.

The desirability of setting rates for a reasonable period of time is generally recognized as one of the major criteria of a fair return. The criteria is set forth in <u>Bonbright</u>, <u>Principles of Public Utility Pates</u>, (Second Edition, 1988), p. 206, as follows:

"If public utilities were required to raise and lower their rates year by year, with the object of maintaining a fixed annual rate of return, the resulting necessary changes in rate schedules would prove inconvenient alike to the ratepayers and to the corporate managements."

For all of the above reasons, we find and conclude that the prices for which the Company's services must be rendered and the desirability of setting rates for a reasonable period

of time are appropriate factors for us to consider in determining the reasonable rate of return on common equity for the Company.

As hereinafter set forth in more detail, we considered the prices of the Company's services and the desirability of setting rates for a reasonable period of time by recognizing that Piedmont is growing rapidly and must constantly raise new capital to support its growth. If Piedmont's rate of return (and, therefore, its rates) were set at the low end of a reasonable range of rates of return, Piedmont would be required to file repeated rate cases. For these reasons, we have allowed Piedmont an opportunity to earn a return at the upper end of a reasonable range of returns.

(5) The public demand for the growth and system expansion which is required to maintain the Company's construction program for the foreseeable future.

Company witness Schiefer, Chief Executive Officer of the Company, and Company witness Skains, President and Chief Operating Officer of the Company, jointly testified that the Company has made substantial capital expenditures in South Carolina to expand, improve and maintain its existing facilities since it was last permitted a general increase in South Carolina rates in 1995. These capital expenditures have increased gross utility plant in South Carolina by approximately 63% and will require the Company to secure needed capital through the issuance of additional debt and equity securities that cannot be marketed on reasonable terms unless it is able to earn a fair and reasonable rate of return on its investment. Tr., Vol. 1, Schiefer and Skains at 22.

For all of the above reasons, we find and conclude that the public demand for the growth and system expansion that is required to maintain the Company's construction program is an appropriate factor for us to consider in determining the reasonable rate of return on common equity for the Company.

As hereinafter set forth in more detail, we considered the public demand for the Company's services and the Company's requirements to provide additional capital and services to meet this public demand by allowing Piedmont an opportunity to earn a rate of return at the upper end of a reasonable range of rates of return.

# d. Evidence upon which Finding and Conclusion No. d is based.

The evidence upon which Finding and Conclusion No. d is based includes all of the evidence set forth in support of Findings and Conclusions Nos. a through c and the additional evidence set forth in the following discussion of our analysis of the relevant factors and our application of the law. This evidence is discussed in detail in the following section of this order.

# 3. Analysis of the Relevant Factors and Application of the Law.

In the preceding sections of this Order, the Commission has set forth the various factors which it finds and concludes to be relevant to its decision of the reasonable rate of return on common equity for the Company. Now, the Commission will analyze the evidence and explain how it applied the relevant factors and the law in determining the reasonable rate of return on common equity for the Company.

#### a. Recommendations of Cost of Capital Witnesses.

Each of the three cost of capital witnesses conducted a number of different DCF, CAPM and other methods to estimate the Company's cost of capital, and reached different results. Company witness Murry recommended a rate of return of 12.6%. Staff witness Spearman recommended a rate of return between 11.1% and 11.6%. Consumer Advocate witness Watkins

recommended a return of between 9.5% and 11.0%. In the following paragraphs, we will examine these recommendations and the evidence upon which the recommendations are made.

## b. Criticism of Various Cost of Capital Studies.

Company witness Murry contended that Consumer Advocate witness Watkins based his recommendations on "a series of mechanical averages." Dr. Murry contended that in his DCF analysis, Mr. Watkins "constructed a stair-step series of 72 moving averages in reaching his growth rate result" and that "averaging together a group of numbers without a reasonable likelihood that they represent investors' expectations for Piedmont in current markets is not an informative exercise." Consumer Advocate witness Watkins' DCF methods were also criticized for (a) using several companies multiple times in this averaging process, resulting in a statistical bias, (b) including negative growth rates in his averaging methods, when, according to Dr. Murry, investors expect a positive growth rate in earnings from the Company, and (c) for failing to observe that his conclusions are inconsistent with the June 21, 2002, Value Line which "clearly indicated that the average expected return for 2002 and beyond for the gas distribution companies is 11.5 percent." Tr., Vol. 2, Murry at 674-675. With respect to his CAPM analysis, Consumer Advocate witness Watkins was criticized for using a geometric average that, according to Ibbotson's Valuation Edition, 2002 Yearbook, is not appropriate. Id. at 676.

Consumer Advocate witness Watkins also leveled certain criticisms at Dr. Murry's testimony, however, we believe and hold that the rate of return testimony of Dr. Murry is more credible than that of Consumer Advocate witness Watkins, for the reasons stated above.<sup>3</sup>

All of the testimony and criticism illustrates one immutable fact. The various studies by the various witnesses all require a great deal of judgment and cannot be used as the sole basis for

<sup>&</sup>lt;sup>3</sup> Although we are mindful of Dr. Spearman's testimony, we believe that the factors outlined in Dr. Murry's testimony as described in this Order mandate adoption of Dr. Murry's rate of return point of 12.6%.

our determination of a fair and reasonable rate of return for Piedmont. Nevertheless, we believe that the testimony and criticism is instructive.

## c. Other Factors Considered by the Commission.

#### (i) The present turmoil in the energy markets.

Staff witness Spearman testified that he "would expect investors to require somewhat higher returns than they may have required in less turbulent times" and that "it would not be unreasonable for an investor to set the upper limits of the CAPM and Risk Premium expected returns as the lower limit." Tr., Vol. 2, Spearman at 652. Company witness Murry testified that "the sudden evaporation of such a great deal of wealth and the loss of confidence in financial reporting had a sobering effect on investors" which "can only increase the cost of raising capital" and "there is a greater risk to the companies acquiring gas supplies in the current markets." Tr., Vol. 1, Murry at 235. We have recognized these expectations and risks by selecting a return that is at the upper end of returns that we believe to be fair and reasonable.

# (ii) Protection against competition versus the shift in risks within the natural gas industry.

As previously noted, the Company has historically had a certain amount of protection against certain risks as a result of its distribution status; however, this protection has been eroding as a result of changes in the natural gas industry. We find that the Company has experienced additional risks as a result of the changes in the natural gas industry including the availability of gas supplies, the deliverability of gas supplies, and competition from other suppliers of gas and transportation. We also find that these risks are greater for a company like Piedmont that is rapidly adding customers and must continually provide new gas supplies and deliverability of those gas supplies for its expanding customer base. These risks justify a return on common equity at the upper end of proposed returns.

# (iii) Prices of Piedmont's services and the desirability of setting rates for a reasonable period of time.

As stated in the Hope case, it is the end result reached, not the method employed, that is controlling, and, in reaching that result, we must balance the interests of both the investor and the consumer. In that connection, we have considered the fact that the Company's rates are not out of line with other gas utilities in South Carolina. Furthermore, Piedmont's rapid growth is evidence that its rates have been found to be fair and reasonable by its customers.

Frequent changes in rates would be inconvenient for both ratepayers and the Company. In that connection, we note that Piedmont has been investing considerable amounts of capital each year to add facilities and customers in South Carolina. If we were to set a rate of return at the low end of the reasonable range of returns, it can reasonably be expected to cause Piedmont to file more frequent rate cases. This is another reason we believe Piedmont should be allowed a return at the upper end of proposed returns.

# (iv) The public demand for growth and the need for capital to support that growth.

Piedmont has increased its gas plant by more than 71% since 1995. As stated in the Company's verified application, the Company will be required to secure capital through the issuance of additional debt and equity securities to maintain this growth rate. We find that the need for this new capital for providing additional services to South Carolina customers justifies the allowance of a rate of return at the upper end of reasonable rates of return. If Piedmont's return is too low, it will have difficulty obtaining capital at reasonable costs to support its continued growth.

# 4. Conclusions with respect to rate of return on common equity.

As noted at the outset of our discussion of the appropriate rate of return on common equity for the Company, the fixing of a fair rate of return cannot be determined with precision since it is not derived from a formula, but must be reached through the exercise of reasonable judgment. Nevertheless, we have weighed the testimonies of qualified experts and we have exercised our collective judgment as to what rate of return on common equity, once included in the ratemaking formula, would permit the Company to continue to provide adequate service to its existing and new customers and to have the opportunity to earn a fair return for its stockholders. We have set forth the various factors considered by the Commission, and we have explained how each of these factors affected our ultimate decision.

For all of the reasons set forth above, we find and conclude that the Company's rate of return on common equity should be at the upper end of this reasonable range. We find and conclude that the reasonable rate of return on common equity for the Company in this proceeding is 12.6% as recommended by Company witness Murry. We find that this rate of return is sufficient to protect the financial integrity of the Company, to preserve the property of the investor, and to permit the Company to continue to provide reliable service to present and future customers at reasonable rates. We also find and conclude that the overall return of 10.39% that results from the use of the approved capital structure, the 7.71% cost of long-term debt and the 12.6% rate of return on common equity is just and reasonable to the Company and to its ratepayers.

#### VIII. Rate of Return.

An important function of ratemaking is the determination of the overall rate of return which the utility should be granted. This Commission has utilized the following definition of "rate of return" in previous decisions, and continues to do so in this proceeding:

"For regulatory purposes, the rate of return is the amount of money earned by a regulated company, over and above operating costs, expressed as a percentage of the rate base. In other words, the rate of return includes interest on long-term debt, dividends on preferred stock, the earnings on common stock and surplus. As Garfield and Lovejoy have put it "the return is that money earned from operations which is available for distribution among various classes of contributors of money capital. In the case of common stockholders, part of their share may be retained as surplus."

Phillips, The Economics of Regulation, pp. 358 (Third Edition 1988).

The United States Supreme Court's landmark decision in Bluefield Water Works and Improvement Co. v Public Service Commission of West Virginia, 262 U.S. 679 (1923), delineated general guidelines for determining the fair rate of return in utility regulation. In the Bluefield decision, the Court said:

"What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risk and uncertainties; but it has no constitutional rights to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time, and become too high or too low by changes affecting opportunities for investment, the money market, and business generally."

262 U.S. at 692-693.

During the subsequent years, the Supreme Court refined its appraisal for regulatory precepts. In its frequently cited <u>Hope</u> decision, <u>supra</u>, the Court restated its views:

"We held in <u>Federal Power Commission v. Natural Gas Pipeline Co...</u> that the Commission was not bound to the use of any single formula or combination of formulae in determining its rates. Its ratemaking function, moreover involves the making of "pragmatic adjustments" (citation omitted) ... Under the statutory standard of "just and reasonable" it is the result reached, not the method employed which is controlling (citations omitted) ...

The ratemaking process under the Act, i.e., the fixing of "just and reasonable" rates involves a balancing of the investor and the consumer interest. Thus we stated in the Natural Gas Pipeline Co. case, that regulation does not insure that the business shall produce net revenues. (citation omitted).

But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. (citation omitted). By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital."

320 U.S. at 602-603.

The validity of these decisions has not been eroded, as indicated by the language of the more recent decision of the Supreme Court in <u>In Re: Permian Basin Area Rate Cases</u>, 390 U.S. 747 (1968). This Commission has consistently operated within the guidelines set forth in the <u>Hope</u> decision. <u>See also</u>, <u>Southern Bell</u>, <u>supra</u>, 244 S.E.2d at 280-83.

The rate of return which the Commission has herein found to be fair and reasonable should enable the Company to maintain its level of good service and preserve its financial integrity. Patently, however, the Company must insure that its operation and maintenance expenses remain at the lowest level consistent with reliable service and exercise appropriate managerial efficiency in all phases of its operations. The Commission has consistently

manifested its abiding concern for the establishment and continuation of efficiency programs on the part of its jurisdictional entities. The Commission reiterates its consistent statement that we are not inclined to be completely satisfied with the cost reduction and efficiency programs of any jurisdictional entity. Consequently, the Commission will continue to expect the Company to design and implement such programs in the future as an index of good management practice in the interest of its customers and of the Company itself.

In this Order, we have previously found that the capitalization ratios set forth in Paragraph VI. are appropriate and should be used for ratemaking purposes herein. The Commission finds that the embedded cost rate for long-term debt of 7.71% is fair and reasonable for use in this proceeding. For the purposes of this proceeding, the Commission has herein found the proper cost rate for the Company's common equity capital to be 12.6%.

Using these findings, the overall rate of return on rate base for the Company's South Carolina operations may be derived as computed in the following table:

**Overall Rate of Return** 

	Ratio	Cost	Weighted Cost
Long-Term Debt	45.10%	7.71%	3.48%
Common Equity	<u>54.90%</u>	12.60%	<u>6.91%</u>
Total	100.00%		10.39%

# IX. Revenue Requirements.

The Company's total income for return after accounting adjustments and prior to any rate adjustment, for its South Carolina operations, is \$13,991,526. This amount, when divided by the Company's rate base of \$184,083,962 as calculated, produces a rate of return on rate base of 7.60%.

In order to achieve an overall rate of return on its South Carolina operations at the level of 10.39%, which this Commission has found to be appropriate and reasonable for the test year period, as adjusted, for the reasons previously indicated, the Company will require additional revenues of \$8,381,220 from its South Carolina operations.

Total income for return, both before and after the approved increase, as found by the Commission, is illustrated as follows:

**Total Income for Return** 

Before Revenue Increase	<u>Total</u>
Net Operating Income AFUDC	\$13,373,021 584,230
Customer Growth	34,275
Total Income for Return	\$13,991,526
After Revenue Increase	
Net Operating Income	\$18,502,975
AFUDC	584,230
Customer Growth	47,423
Total Income for Return	<u>\$19,134,628</u>

#### X. Allocation of Revenues.

The revenue requirements of the Company having been determined, the Commission is also concerned with the determination of the specific rates and the development of the rate structure that will yield the required revenues. It is generally accepted that proper utility regulation requires the exercise of control over the rate structure to ensure that equitable treatment is afforded each class of customer.

The three primary criteria of a sound rate structure have been set forth as follows:

"... (a) the revenue-requirement or financial-need objective, which takes the form of a fair-return standard with respect to private utility companies; (b) the fair-cost

apportionment objective which invokes the principle that the burden of meeting total revenue requirements must be distributed fairly among the beneficiaries of the service, and (c) the optimum-use or consumer rationing objective, under which the rates are designed to discourage the wasteful use of public utility services while promoting use that is economically justified in view of the relationships between costs incurred and benefits received."

Bonbright, Principles of Public Utility-Rates (1961), p. 292.

These criteria stated above have been used by this Commission in past cases and are utilized again in this proceeding.

In approving the increases and decreases in the Company's various classes of service, the Commission has undertaken to recognize and reconcile the Commission's consistent ratemaking objectives to meet the revenue requirements found fair and reasonable. The Commission has considered the revenue increases and decreases for each class of service shown in Table XII, infra, and finds the same to be fair and reasonable, and appropriate for this proceeding.

## Approved Increase (Decrease) by Class

Class of Service	Approved Increase
	(Decrease)
Residential	\$6,078,152
Commercial	3,272,697
Firm Industrial Sales	62,123
Firm Transportation	(886,632)
Interruptible Sales	88,783
Interruptible Transportation	(536,090)
Special Contract	0
Other Operating Revenues	301,837
Outdoor Gaslight Service	350
Total Increase	<u>\$8,381,220</u>

Company witness Fleenor testified that in the Company's design of rates he considered traditional rate design principles, the results of a cost of service study and the need to remain

competitive. The "traditional rate design principles" included value of service, revenue stability, system load equalization and the need to avoid discrimination among classes of service.

Company witnesses Schiefer and Skains testified:

"We are proposing cost allocation, rate design and tariff changes that will <u>reduce</u>, <u>but not eliminate</u>, the cost burden that new customers place on existing customers, the cost of service subsidies provided by industrial customers to the residential customer class, the cost of service subsidies provided by high load factor customers to low load factor customers and the problem of declining average gas usage per customer. The measured and balanced approach to these long-standing issues proposed by Piedmont in this proceeding is designed to address these issues in a meaningful way without creating rate shock or undue hardship on any customer class."

They further testified:

"To address the issue of the cost burden of new customers on existing customers, we are proposing to reduce the subsidies provided by the industrial customers to the residential customer class, where most of the Company's growth occurs. We are allocating costs to the residential customer class at levels that permit us to recover a larger percentage of the costs we incur to serve these customers."

SCEUC witness O'Donnell testified that the SCEUC was "fully supportive of Piedmont's rate design in this case" and that he believed that "Piedmont has made a significant step in correcting a rate design inequity that has plagued the Carolinas for many years." He also testified:

"This change in rate design by Piedmont should help the Company and the State of South Carolina retain, and begin to attract new industrial load and its associated jobs and tax base."

Both Company witness Fleenor and Consumer Advocate witness Ileo offered cost of service studies into evidence. Although the two witnesses reached different conclusions on how various costs should be allocated among the various customer classes, they both concluded that the Company was earning a below average return from the residential class of customers. Consumer Advocate witness Ileo and SCEUC witness O'Donnell disagreed over whether the

cost of service study relied on by Company witness Fleenor contained a bias against residential customers.

In addition to the evidence recited above, the allocation of the additional revenues to the various classes is supported by the following:

- (1) All parties appear to agree that under Piedmont's current rate design, industrial customers are subsidizing residential and commercial customers.
- (2) The change in the rate design proposed by the Company should help the State of South Carolina retain existing industry and, perhaps, attract new industry. The Commission finds and concludes that this is an important goal considering the loss of manufacturing jobs in recent years and the effect of that loss of jobs on personal income, personal income tax revenues, unemployment payments and other such costs.
- (3) The change in the rate design proposed by the Company is consistent with value of service considerations. The industrial market is the most volatile and value responsive sector since natural gas often competes with other fuels on a daily or monthly basis. Large-volume customers receiving interruptible gas service have equipment capable of using other fuels. If industrial rates are set above the cost of alternate fuels, these customers would simply purchase the alternate fuels.

## XI. Rate Design.

#### A. Residential Customers.

The Company proposed a rate design for residential customers that segments customers into two rate categories: a Standard Rate, or low base load usage category, and a Value Rate, or high base load usage category. These categories are based on the customer's actual natural gas usage during a defined "Base Load Period," specifically, the cycle billing months of July and

August in any given year. The rate structure for customers falling into the Standard Rate category is characterized by a constant rate per therm for the entire year. As a result, Standard Rate customers will pay the same rate per therm for natural gas used in the winter as they would for natural gas used in the summer if the Commission were to approve the proposed rate structure as filed. For customers in the Value Rate category, the rate structure is characterized by a winter – summer differential. Value Rate customers will pay less per therm during the summer period than they will pay in the winter period. Also, rates under the Value Rate category are lower overall than the rates under the Standard Rate category. New residential customers will be assigned to either the Value Rate or Standard Rate customer classification according to their reasonably anticipated base load usage associated with the type and number of appliances installed at their premises prior to the natural gas meter being set and turned on. The facilities charges will be the same under either rate schedule; however, a different facilities charge for the winter months would apply to all residential customers than for the summer months.

A residential customer who uses a minimum of 15 therms in the cycle billing months of either July or August would qualify for service under the Value Rate category. The Standard Rate category would apply to those customers whose actual consumption is less than 15 therms per month in both the cycle billing months of July and August.

In support of this new residential rate design, Mr. Fleenor testified:

"The proposed changes to the residential rate schedules will benefit Piedmont's distribution system in two important ways. First, customers who use natural gas on a year around basis in quantities and patterns that result in higher load factors help to reduce the Company's per unit costs and, ultimately, to lower the per unit charges for all customers. Second, using a customer's actual consumption for rate classification purposes is more appropriate and more equitable for all system customers and more accurately aligns costs and benefits with specific customer segments. The proposed rate design and tariff changes will help reduce the subsidization of low load factor customers by high load factor customers."

Consumer Advocate witness Ileo testified that he generally supported the bifurcation into new Value Rate and Standard Rate service categories since "they better reflect cost causation principles and will serve to promote more efficient utilization of gas supplies." No party offered any evidence in opposition to the proposed changes to a Value Rate and Standard Rate service for residential customers. Therefore, the Commission finds and concludes that the bifurcation of the residential rates into a Value Rate and Standard Rate service as proposed by the Company will better reflect cost causation principles, and will serve to promote more efficient utilization of gas and is just and reasonable.

In order to assist in the transition of residential customers previously classified as Year Round that will become Standard Rate under the newly approved structure, the Company and the Staff have agreed to restructure the class differentials and seasonal differentials. For the purpose of mitigating the transistional changes, the Standard Rate will pay different summer and winter rates without prejudice to the desired characteristics discussed above. The Commission also finds that these modifications are just and reasonable.

#### B. Commercial Customers.

Under the proposed commercial service and rate structure, commercial customers are classified as either Small General Service or Medium General Service types. These two major categories would each be further segmented into either the Standard Rate or Value Rate classifications. The new commercial rate schedules would have the separate designations of Rate Schedule 202, Small General Service-Standard Rate; Rate Schedule 232, Small General Service-Value Rate; Rate Schedule 252, Medium General Service- Standard Rate; and Rate Schedule 262, Medium General Service-Value Rate. All of these rates would be characterized by a winter — summer rate differential and would utilize a load factor calculation called the

"Summer Load Percentage" or SLP. The SLP represents the percentage of annual load used during the months of April through October. The SLP would be the criteria used to segment customers into either the Standard Rate or the Value Rate category. Those customers with SLPs less than or equal to 30% would qualify for the Standard Rate, and those customers with SLPs greater than 30% would qualify for the Value Rate. Standard Rate customers would be charged a flat winter rate and a lower flat summer rate as an incentive to add summer load and improve their SLP. Value Rate customers would have lower rates than Standard Rate customers in both the winter and summer rate periods. Additionally, Value Rate customers would have block rate incentives not available to Standard Rate customers.

A non-residential customer whose average daily usage is less than 20 dekatherms (Dts) per day would qualify for service under the Small General Service rate schedules. A non-residential customer whose average daily usage is equal to or greater than 20 Dts but less than 50 Dts per day would qualify for service under the Medium General Service rate schedules.

Company witness Fleenor testified that the splitting of the Commercial customers into four separate services would benefit the Company's distribution system. The large-volume customers, those who use natural gas for industrial processing, would be served under a separate rate schedule from the more traditional commercial customers who use gas mostly for space heating, water heating and cooking.

Company witness Fleenor also testified:

"The proposed changes will better align customer costs and benefits, volumes and usage characteristics and provide an incentive for commercial customers to add year around and summer gas load for a more efficient use of the Company's distribution system, and ultimately, lower per unit costs for all customers. The new service structure will also help reduce the subsidization of low load factor customers by high load factor customers."

Consumer Advocate witness Ileo generally supported the commercial rate design, however, he proposed the addition of two more classes for commercial customers who use less than two Dts per day. Since the change proposed by the Consumer Advocate appears to be made for the purpose of providing a lower facilities charge for these small commercial customers, it will be addressed below in the discussion of facilities charges. Neither the Staff nor the SCEUC offered any evidence on the design of commercial rates.

For the reasons provided by Company witness Fleenor, the Commission finds the Company's rate design proposals to be fair and reasonable.

## C. Outdoor Gas Lighting.

The Company proposed to eliminate the availability of non-metered outdoor gaslight service under Rate Schedule 205 effective November 1, 2002. Under the proposed rate design for non-metered outdoor gas lighting, only those non-metered gaslights installed prior to November 1, 2002, would qualify for such service. Under the Company's proposal, the current \$10 per fixture monthly charge would be increased to \$15 per fixture. In support of this proposal, Company witness Fleenor testified that at the existing variable summer residential rate of \$7.954 per dt, the existing rate is unprofitable and that the \$15 charge is approximately equivalent to the average monthly gas consumption for a gaslight priced at the proposed residential Value Rate. No party opposed the rate design for outdoor gas lights, and the Commission finds and concludes that the proposal is fair and reasonable.

#### D. Industrial Rates.

The Company proposed to completely unbundle large customer sales and transportation services by offering stand-alone firm and interruptible transportation services. It proposed to offer an optional firm standby gas supply service (subject to a fixed monthly standby demand

charge and market sensitive commodity index pricing) for customers who select stand-alone firm transportation service. It proposed to provide both firm and interruptible transportation customers the flexibility to enter into agency arrangements by which third-party marketers are authorized to act on the customers' behalf for nominations, billing and imbalance management purposes. It also proposed to permit marketers to aggregate gas for a group of transportation customers, thereby creating administrative efficiencies and allowing the marketer to better manage imbalances on a pooled basis. These new services are offered with a new rate design (*i.e.*, a departure from "full margin" rate design for fixed pipeline demand costs) and several changes in the Company's operating procedures.

Currently, the Company's large industrial customers have the ability to switch between sales and transportation services on a monthly basis. As a result, the Company incurs substantial fixed pipeline demand gas costs to permit it to provide sales service whether or not the customers elect to purchase natural gas from the Company. Under the proposed service structure, customers must make an annual election to purchase gas under the Company's sales service or to utilize its transportation service. If a customer elects transportation service, it may not switch back to sales service until its next annual election, except for those firm transportation customers electing to purchase standby sales service.

#### Company witness Fleenor testified:

"With these binding annual elections by industrial customers, the Company will have the ability to improve its gas supply planning process, send better pricing signals to customers based on the services they have elected and eliminate the current gas cost subsidization among customer classes that occurs through the monthly switching process. Further, we will have an opportunity to resell or redeploy upstream pipeline capacity that is no longer used by the Company for stand-alone transportation customers, thus reducing system fixed pipeline costs. As a result, we will have an opportunity to sell the gas on which we have paid demand gas costs to other customers and, therefore, recover a large portion of

those costs. We can then pass these savings on to the transportation customers through lower rates."

SCEUC witness O'Donnell testified that he was "fully supportive of Piedmont's rate design changes in this case" and that "Piedmont's rate design changes in this case should accordingly be approved."

Consumer Advocate witness Ileo testified that he was "able to support PNGC's proposal to lower rates for its large firm, interruptible, and transportation customers by an aggregate of \$1.217 million." However, he added that "this proposal becomes unreasonable at South Carolina jurisdictional increases greater than that recommended by Mr. Watkins." He did not, however, suggest a different rate design in the event that this Commission approves an increase greater than the approximately \$2.7 million increase recommended by Mr. Watkins.

The Commission finds that the industrial rates and rate design proposed by the Company are just and reasonable and should be approved. In making this finding, we adopt the reasons supporting such rates and rate design offered by Company witness Fleenor and SCEUC witness O'Donnell in support of these rates and rate design. Although the Commission shares the Consumer Advocate's concerns that there should be limits on the amount of revenue shifted from the industrial class to the residential class, the Commission does not believe the amount of the shift in this case is inappropriate considering the current subsidy being provided to the residential class by the industrial class and the other reasons for the need for a decrease in industrial rates set forth in the testimony of Company witness Fleenor and SCEUC witness O'Donnell as summarized above.

#### E. Changes to Tariffs.

The Company proposed a number of changes to its tariffs. A copy of all revisions was attached to the Application as Exhibit 3. No party has opposed these changes, and the Commission finds them to be just and reasonable.

#### F. Calculation of "R" Factors.

The Company's Weather Normalization Adjustment (WNA) clause requires a recalculation of the "R" factors, base load factors and heat load factors in each general rate case. In this case, the Company proposed to update all of these factors. The Company proposed base load and heat factors the same as those used to perform the normalization adjustment for pro forma revenues. The "R" factors are calculated by subtracting the fixed and variable gas costs from the proposed rates, and are used to calculate the WNA amount computed for residential and commercial customers. No party opposed the method employed by the Company to determine these "R" factors, and the Commission finds that the method is appropriate.

#### G. Allocation of Fixed Gas Costs.

The fixed gas cost component of the billing rates for the residential and commercial customer classes should be modified as and when the billing rate to the customer changes. Piedmont proposed to construct the components (commodity gas costs, fixed gas costs and margin) of the billing rates in such a manner as to stabilize the distribution margin component so that it would be less susceptible to changes in weather or customer reclassifications.

The proposed recovery of fixed gas costs by the Consumer Advocate mirrors the allocation proposed by the Company, differing only in the total amount of fixed gas costs to be recovered. As shown in Consumer Advocate witness Ileo's Exhibit (MLT-11), the Consumer

Advocate proposes to recover the same percentage of the total fixed gas costs from each customer class as proposed by the Company.

Since the Commission has previously addressed the appropriate level of total fixed gas costs and the parties do not disagree on the percentage assignment of the recovery of fixed gas costs, the Commission finds that the percentage recovery of fixed gas costs proposed by the Company is just and reasonable.

#### H. Service Regulations.

The Company proposed several changes to its service regulations. The first change is to its service line extension policy. Under the proposed service line policy, a customer would be required to have central gas heating before the Company would run a service line at no cost to the customer. The Company would look at each project individually; however, and there may be instances where a service line will be installed at no cost to the customer without central gas heating if it is economically justified. The determination of whether an individual service line is economically justified would be based on an objective test. No party objected to this proposed change, and the Commission finds it to be just and reasonable.

The Company also proposed two amendments to its billing procedures. The first change is to include the option of billing a customer via the Internet, at the election of the customer. The second change involves its billing estimating procedures. Company witness Morris testified that due to events such as those on September 11, 2001, there may be circumstances, beyond the Company's control, that could materially alter the normal course of business. Therefore, the Company proposed the use of billing estimates for up to two successive monthly periods, or greater, in situations resulting from acts of force majeure. No party objected to these proposed changes, and the Commission finds them to be just and reasonable.

#### I. Other Operating Revenue.

The Company proposed to increase the return check charge from the current rate of \$15.00 to \$25.00. The Company proposed to increase the reconnect fees of \$40.00 during nonpeak periods (February through August) and \$60.00 for on-peak periods (September through January). No party objected to the proposed increases to returned check charges and reconnection fees, the Commission finds them to be just and reasonable, and they are therefore approved.

#### J. Facilities Charges.

The Company proposed to increase its monthly facilities charges to the following:

Residential Service: \$10.00/Month for winter months

8.00/Month for summer months

Commercial Service \$22.00/Month for customers using less than

20/DT/Day

\$75.00/Month for customers using 20/Dt/Day and over

Industrial Service

\$250.00/Month

No party objected to the proposed industrial facilities charge, and the Commission finds it to be just and reasonable.

The only objection to the commercial facilities charges came from the Consumer Advocate who recommended a facilities charge of \$12.00 for commercial customers who consume less than two Dts per day. The only reason given for this recommendation was that the customers to whom the \$12.00 facilities charge would apply have a "usage characteristic not vastly different from residential customers."

The Commission notes that the commercial rate schedule proposed by the Company and approved herein is split into four separate services. The Commission does not believe it would be in the public interest at this time to split the commercial service into an additional service to provide a lower facilities charge for a select group of these customers. Although the use of gas for these small commercial customers may not be vastly different from the use of gas for residential customers, that use is for a business or other non-residential use as opposed to a residential use. The Commission does not believe a \$22.00 facilities charge is unreasonable for a business or other non-residential user.

The Consumer Advocate was also the only party to object to the residential facilities charge. Although Consumer Advocate witness Ileo agreed that the residential facilities charges proposed by the Company could be justified from a cost causation standpoint, he testified that, in his opinion, a change from the current \$3.50 to \$8.00 in the summer and \$10.00 in the winter would have too great an impact on customers.

Staff witness Sires provided a comparison of current facilities charges for other states in the Southeast. This comparison shows that South Carolina's facilities charges are considerably less than any of the other states, whose facilities charges range from \$6.00 (for Atmos Energy) and \$8.00 (for Piedmont) in Tennessee to \$8.50 for Mobile Gas Service Corp. in Alabama.

The Commission has carefully considered the evidence relating to residential facilities charges and finds and concludes that the \$8.00 summer and \$10.00 winter facilities charges proposed by the Company are fair and reasonable.

(1) According to the testimony of Company witness Fleenor, the allocation of fixed distribution and pipeline demand costs to residential customers equals \$34.90 per customer/month; therefore, even the \$8.00 summer and \$10.00 winter facilities charges will not permit the Company to totally recover all such fixed costs through fixed charges.

- (2) The Company's current facilities charges are out-of-line with facilities charges imposed by gas distribution companies in other jurisdictions in the Southeast and with the fixed charges for other products and services.
- (3) Although the shifting of cost from the volumetric rate to the facilities charge may cause some shifting among individual residential customers, it does not increase the total revenue obtained from the residential customers. It does, however, better match costs with cost causation.
- (4) Higher facilities charges will enable the Company to recover more of its costs from new customers in fixed charges as they are added to the system, making it more economical for the Company to continue to add residential customers in South Carolina.

#### K. Approved Rates.

Based on the foregoing analysis of the evidence and a careful consideration of the entire record, the Commission finds and concludes that the rates attached hereto as Appendix A are fair and reasonable to the Company's customers and shareholders.

#### XII. OFF-SYSTEM SALES AND CAPACITY RELEASE.

The Staff recommended that the Company's PGA be amended to reflect a sharing of margin from off-system sales and capacity release transactions. More specifically, the Staff recommended that margin from off-system sales and capacity release transactions be subject to a sharing mechanism pursuant to which 75% of such margin or cost credits would be credited to the deferred cost of gas account 25304 and the Company would retain 25% of the margin. No party objected to this proposal, and the Commission finds it to be fair and reasonable. The Commission also finds that capacity release credits and off-system sales shall be allocated to South Carolina using the same design day methodology as approved herein for fixed demand costs.

#### XIII. DEPRECIATION RATES.

The Company's present depreciation rates were approved by the Commission on November 7, 1995, in Order No. 95-1649 in Docket No. 95-715-G. In 1999, the Company completed a new depreciation study based on depreciable property in service as of October 31, 1998. A copy of that study was filed with the application in this docket. The Company requested approval of the new depreciation rates contained in the filed depreciation study. Staff witness Sires testified that the new depreciation rates would decrease annualized depreciation expense based on total South Carolina plant at January 31, 2002, by \$159,464. No party opposed the new depreciation rates, and the Commission finds them to be appropriate.

#### XIV. FINDINGS AND CONCLUSIONS.

Based upon the foregoing considerations and after a full review of the testimony, exhibits and complete record in this proceeding, the Commission has made the following findings and reached the following conclusions concerning the operations, the rate of return and the reasonable earnings requirements to be allowed the Company:

- 1. That Piedmont Natural Gas Company, Inc., is a gas utility and is subject to the jurisdiction of this Commission, pursuant to S.C. Code Ann.§§58-5-10, et seq. (Law Co-op. 1977);
- 2. That the appropriate test period for the purposes of this proceeding is the twelvementh period ended January 31, 2002;
- 3. That the Company in its Application is seeking an increase in rates and charges to certain customers in this proceeding that will produce additional annual revenues of \$15,336,891;

- 4. That an end of test year, original cost rate base, as adjusted, of \$184,083,962 consisting of the components set forth in this Order should be adopted for ratemaking purposes;
- 5. That the capital structure set forth in this Order should be adopted for this proceeding;
- 6. That the rate of return on the Company's rate base, during the test year, after accounting and pro forma adjustments, and prior to any rate adjustments, was 7.60%;
- 7. That a fair and proper return on common equity for the Company is 12.6%, which produces the additional revenues of \$8,381,220 which are fair and reasonable;
- 8. That the Company's embedded cost of long-term debt of 7.71% and a cost of common equity of 12.6% should be used in the determination of a fair overall rate of return;
- 9. That the accounting and pro forma adjustments set forth in Section IV of this order are reasonable and proper;
- 10. That the total income for return for the test period, after accounting and pro forma adjustments and prior to rate adjustments, was \$13,991,526, and that such amount of income is insufficient based on the reasonable rate of return found in this proceeding;
- 11. That approval should be given for rates and charges which will provide additional annual gross revenues to the Company of \$8,381,220 on its gas operations;
- 12. That the additional revenues allowed would produce a rate of return on approved rate base of 10.39% which is found to be fair and reasonable in this proceeding;
- 13. That such additional revenues and the return which these revenues produce are well within the range of reasonableness and fairness and must be provided if the Company is to meet all of its customer requirements;

- 14. That the additional revenues would provide a rate of return on common equity of 12.6%;
- 15. That the schedule of rates and charges attached hereto as Appendix A are fair and reasonable and should be approved for service rendered on and after November 1, 2002;
- 16. That the schedule of WNA factors attached hereto as Appendix B, and allocation of costs of gas attached hereto as Appendix C are fair and reasonable and should be approved for service rendered on and after November 1, 2002;
- 17. That the Company should file with the Commission within 7 days from the date of this Order, rate schedules which reflect the rates contained in Appendix A and tariffs reflecting the findings contained herein;
- 18. That the changes to the Company's tariffs set forth in Exhibit 3 to the Application be, and they hereby are, approved;
- 19. That the depreciation rates set forth in Exhibit 2 to the Application be, and they hereby are, approved;
- 20. That beginning with the effective date of the rates approved herein, 75% of the margin or cost savings realized from off-system sales and capacity release transactions shall be credited to the deferred cost of gas account 25304 and the Company shall be entitled to retain the remaining 25%;
- 21. That the Company should continue to file with this Commission, as previously ordered, quarterly reports showing:
  - (1) Rate of return on rate base;
  - (2) Return on common equity;
  - (3) Earnings per share of common stock; and

Debt coverage ratio of earnings to fixed charges. (4)

#### IT IS THEREFORE ORDERED:

- That the proposed rate schedules filed by the Company on May 3, 2002, are not 1. just and reasonable.
- 2. That the rates set forth in Appendix A hereto are reasonable and proper and are hereby approved.
- 3. That the WNA factors and allocation of costs of gas attached hereto in Appendices B and C are fair and reasonable and are hereby approved.
- 4. That beginning with the effective date of the rates approved herein, 75% of the margin or cost savings realized from off-system sales and capacity release transactions shall be credited to the deferred cost of gas account 25304 and the Company shall be entitled to retain the remaining 25%.
- 5. That the Company file all reports herein identified in accordance with the findings contained herein.
- 6. That this Order shall remain in full force and effect until further order of the Commission.

BY ORDER OF THE COMMISSION:

Mignon L. Clyburn, Chairman

ATTEST:

Gary E. Walsh, Executive Director

Jary E. Walsh

(SEAL)

### APPENDIX-A

#### **RATE SCHEDULE 221**

Residential Service

**Standard Rate** 

Winter (Nov-Mar)
Summer (Apr-Oct)

**Facilities Charge** 

10.00 8.00 Rate per therm

0.91686 0.91480

**RATE SCHEDULE 201** 

Residential Service

Value Rate

Winter (Nov-Mar)
Summer (Apr-Oct)

Facilities Charge

10.00 8.00 Rate per therm

0.74037 0.69819

**RATE SCHEDULE 202** 

Small General Service

**Standard Rate** 

Winter (Nov-Mar)
Summer (Apr-Oct)

Facilities Charge

22.00 22.00 Rate per therm 0.84137

0.81346

RATE SCHEDULE 232

Small General Service

Value Rate

Winter (Nov-Mar)

Summer (Apr-Oct)

first 2,000 over 2,000

first 2,000

over 2,000

Facilities Charge 22.00

22.00

Rate per therm 0.78762

0.76762

0.69908

0.67207

RATE SCHEDULE 252

Medium General Service

Standard Rate

Winter (Nov-Mar)
Summer (Apr-Oct)

Facilities Charge

75.00 75.00 Rate per therm

0.83880 0.79369

**RATE SCHEDULE 262** 

Medium General Service

Value Rate

Winter (Nov-Mar)

Summer (Apr-Oct)

first 5,000 over 5,000

first 5,000

Facilities Charge 75.00

Rate per therm 0.76139

75.00

0.72785

over 5,000

75.00

0.67242

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0.64920

## **RATE SCHEDULE 242**

Motor Fuel

	Facilities Charge	Rate per therm
Winter (Nov-Mar)	22,00	0.54374
Summer (Apr-Oct)	22.00	0.54374

# **RATE SCHEDULE 203**

Large General SalesService

Winter (Nov-Mar) First 15,000 Next 15,000 Next 75,000 Next 165,000 Next 330,000 Over 600,000	Billing Demand 1.90	Facilities Charge 250.00	0.59325 0.52754 0.48041 0.43327 0.38613 0.35756
Summer (Apr-Oct) First 15,000 Next 15,000 Next 75,000 Next 165,000 Next 330,000 Over 600,000	Billing Demand 1.90	Facilities Charge 250.00	0.51897 0.47184 0.44327 0.41470 0.38113 0.35756

RATE SCHEDULE 204
Interruptible Sales Service

	Facilities Charge	Rate per therm
Winter (Nov-Mar)	250.00	
First 15,000		0.64325
Next 15,000		0.57864
Next 75,000		0.53121
Next 165,000		0.48336
Next 330,000		0.43613
Over 600,000		0.39756
	Facilities Charge	Rate per therm
Summer (Apr-Oct)	Facilities Charge 250.00	Rate per therm
Summer (Apr-Oct) First 15,000		Rate per therm 0.52897
First 15,000		0.52897
First 15,000 Next 15,000		0.52897 0.48184
First 15,000 Next 15,000 Next 75,000		0.52897 0.48184 0.45327
First 15,000 Next 15,000 Next 75,000 Next 165,000		0.52897 0.48184 0.45327 0.42470

### **RATE SCHEDULE 213**

Large General Transportation Service

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	Demand E	Billing Demand	Facilities Charge	Rate per therm
Winter (Nov-Mar)	1.30	0.60	250.00	
First 15,000				0.24325
Next 15,000				0.17754
Next 75,000				0.13041
Next 165,000				0.08327
Next 330,000				0.03613
Over 600,000				0.00756

## Standby

	<b>Demand</b>	<b>Billing Demand</b>	Facilities Charge	Rate per therm
Summer (Apr-Oct)	1.30	0.60	250.00	
First 15,000				0.16897
Next 15,000				0.12184
Next 75,000				0.09327
Next 165,000				0.06470
Next 330,000				0.03113
Over 600,000				0.00756

RATE SCHEDULE 214
Interruptible Transportation Service

	<u>Facilities Charge</u>	Rate per therm
Winter (Nov-Mar)	250.00	
First 15,000		0.24325
Next 15,000		0.17754
Next 75,000		0.13041
Next 165,000		0.08327
Next 330,000		0.03613
Over 600,000		0.00756
	Facilities Charge	Rate per therm
Summer (Apr-Oct)	Facilities Charge 250.00	Rate per therm
Summer (Apr-Oct) First 15,000		Rate per therm 0.16897
First 15,000		0.16897
First 15,000 Next 15,000		0.16897 0.12184
First 15,000 Next 15,000 Next 75,000		0.16897 0.12184 0.09327
First 15,000 Next 15,000 Next 75,000 Next 165,000		0.16897 0.12184 0.09327 0.06470

# **RATE SCHEDULE 205**

Outdoor Gas Light

Each Fixture/Month

15.00

# Piedmont Natural Gas Company, Inc. Calculation of "R" Values for WNA Computations DOCKET NO. 2002-63-G

	Base Rate (\$/therms)	Demand (\$/therms)	Commodity	"R" Value (\$/therms)	Heat Factor (therms/DDD)	Base Factor (therms/mo.)
Residential						
Standard Rate	0.91686	0.19655	0.35756	0.36275	0.16267	175798
Value Rate	0.74037	0.02006	0.35756	036275	0.19761	16.96824
Commercial						
Rate 202	0.84137	0.18405	0.35756	0.29976	0.81379	0.00000
Rate 232						
First 2,000 therms	0.78762	0.13030	0.35756	0.29976	0.51709	452.66155
Over 2,000 therms	0.76062	0.10329	0.35756	0.29976	0.51709	452.66155
Rate 252	0.83880	0.18148	0.35756	0.29976	28.22004	0.00000
Rate 262						
first 5,000 therms	0.76139	0.10407	0.35756	0.29976	6.09403	7720.92408
over 5,000 therms	0.72785	0.07053	0.35756	0.29976	6.09403	7720.92408

# Appendix - C

# Piedmont Natural Gas Company, Inc. Allocation of Fixed Gas Costs to Rate Schedules DOCKET NO. 2002-63-G

		w	inter	Summer		Annual		
		Fixed		Fixed		Fixed		
		Cost per therm	Apportionment Percentage	Cost per therm	Apportionment Percentage	Cost per therm	Apportionment Percentage	
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Residential								
Standard R	ate	0.19655	3080%	0.23667	8.88%			
Value Rate		0.02006	2.24%	0.02006	0.87%			
Commercial								
Rate 202		0.18405	15.95%	0.16684	2.62%			
Rate 232	first 2000	0.13030	6.54%	0.05246	2.66%			
	over 2000	0.10330	1.29%	0.02545	0.18%			
Rate 242		0.07912	0.01%	0.07912	0.02%			
Rate 252		0.18148	0.66%	0.14707	0.14%			
Rate 262	first 5000	0.10407	0.83%	0.02580	0.27%			
	over 5000	0.07053	0.74%	0.00258	0.02%			
Firm Sales								
Demand Ch	narge					1.40000	4.52%	
Commodity								
First 15	,000	0.05000	0.72%	0.05000	0.41%			
Next 15	,000	0.04000	0.35%	0.04000	0.15%			
Next 75	,000	003000	0.26%	0.03000	0.08%			
Next 16	5,000	0.02000	0.02%	0.02000	0.00%			
Next 33	0,000	0.01000	001%	000500	0.00%			
Over 60	00,000	000000						
Firm Transpo	rtation							
Standby De	emand					1.30000	1.85%	
Billing Dem	and					0.10000	0.57%	
Commodity								
First 15,	,000	0.05000	0.45%	0.05000	1.03%			
Next 15	,000	0.04000	025%	0.04000	0.54%			
Next 75	•	0.03000	022%	0.03000	0.47%			
Next 16		0.02000	006%	0.02000	0.11%			
Next 33		0.01000	002%	0.00500	0.01%			
Over 60	00,000	0.00000	000%					
Interruptible S								
First 15,		0.10000	2.13%	0.06000	1.05%			
Next 15	,000	0.09110	1.45%	0.05000	0.62%			
Next 75		0.08080	206%	0.04000	0.83%			
Next 16		0.07009	0.50%	0.03000	0.17%			
Next 33		0.06000	0.06%	0.02000	0.03%			
Over 60	00,000	0.04000	0.00%					
Interruptible T	•							
First 15,		0.05000	0.52%	0.05000	1.24%			
Next 15	•	0.04000	0.31%	0.04000	0.71%			
Next 75		0.03000	0.37%	0.03000	0.89%			
Next 16	•	0.02000	0.07%	0.02000	0.16%			
Next 33		0.01000	0.005%	000500	0.01%			
Over 60	0,000	0.00000						